

=> display history full 11-

(FILE 'HOME' ENTERED AT 10:16:58 ON 27 MAR 1998)

FILE 'LCA' ENTERED AT 10:17:20 ON 27 MAR 1998

- L1 903 SEA (CLEAN? OR LAUND? OR RINS? OR DETERS? OR ABSTERS? OR EDULCORAT? OR SANIT? OR HYGIEN? OR DISINFECT? OR DECONTAMINA? OR STERILI? OR ABLUT? OR ELUTRIAT? OR SCRUB? OR SCOUR? OR DEGREAS? OR LIXIV?)/BI,AB
- L2 800 SEA (CLEAN? OR RINS? OR EDULCORAT? OR SANIT? OR DISINFECT? OR DECONTAMINA? OR STERILI? OR ABLUT? OR ELUTRIAT? OR SCRUB? OR SCOUR?)/BI,AB
- L3 6041 SEA (DETACH? OR REMOV? OR WITHDRAW? OR EXTRACT? OR EXT# OR EXTRICAT? OR EJECT? OR UNFASTEN? OR DISCONNECT? OR DISENGAG? OR SEPARAT? OR SEP# OR EXCIS? OR STRIP?)/BI,AB
- L4 5769 SEA (DETACH? OR REMOV? OR WITHDRAW? OR EXTRACT? OR EXT# OR EXTRICAT? OR UNFASTEN? OR DISCONNECT? OR DISENGAG? OR SEPARAT? OR SEP# OR EXCIS?)/BI,AB
- L5 8373 SEA (SOLUTION? OR SOLN# OR SOLVENT? OR RESOLVENT? OR RESOLUTIV? OR DILUENT? OR ELUENT? OR LIQUEF? OR ALKAHEST? OR DISSOL? OR SOLUBILIZ? OR SOLUBILIS? OR FLUX? OR FLUID? OR LIXIV?)/BI,AB
- L6 7320 SEA (SOLUTION? OR SOLN# OR SOLVENT? OR RESOLVENT? OR RESOLUTIV? OR DILUENT? OR ELUENT? OR ALKAHEST? OR DISSOL? OR SOLUBILIZ? OR SOLUBILIS? OR FLUX? OR LIXIV?)/BI,AB

FILE 'WPIDS, BIOSIS, EMBASE, MEDLINE' ENTERED AT 10:30:24 ON 27 MAR 1998

- L7 4 SEA (L2 OR WASH?) (5A) (BONEGRAFT? OR BONE#(3A)GRAFT?)
- L8 38 SEA (L2 OR WASH?) (5A) (BONEGRAFT? OR BONE#(3A)GRAFT?)
- L9 26 SEA (L2 OR WASH?) (5A) (BONEGRAFT? OR BONE#(3A)GRAFT?)
- L10 33 SEA (L2 OR WASH?) (5A) (BONEGRAFT? OR BONE#(3A)GRAFT?)
- TOTAL FOR ALL FILES
- L11 101 SEA (L2 OR WASH?) (5A) (BONEGRAFT? OR BONE#(3A)GRAFT?)
- L12 157 SEA L4(4A) (BONEMARROW? OR BONE#(2A)MARROW?)
- L13 917 SEA L4(4A) (BONEMARROW? OR BONE#(2A)MARROW?)
- L14 666 SEA L4(4A) (BONEMARROW? OR BONE#(2A)MARROW?)
- L15 750 SEA L4(4A) (BONEMARROW? OR BONE#(2A)MARROW?)
- TOTAL FOR ALL FILES
- L16 2490 SEA L4(4A) (BONEMARROW? OR BONE#(2A)MARROW?)
- L17 286075 SEA VACUUM? OR EVACUAT? OR VACUO# OR INVACUO# OR (NEG# OR NEGATIV? OR REDUC? OR REDN# OR LOW OR LOWER? OR DIMINISH? OR DECREAS?) (2A) (PRESS# OR PRESSUR?)
- L18 49887 SEA VACUUM? OR EVACUAT? OR VACUO# OR INVACUO# OR (NEG# OR NEGATIV? OR REDUC? OR REDN# OR LOW OR LOWER? OR DIMINISH? OR DECREAS?) (2A) (PRESS# OR PRESSUR?)
- L19 53457 SEA VACUUM? OR EVACUAT? OR VACUO# OR INVACUO# OR (NEG# OR NEGATIV? OR REDUC? OR REDN# OR LOW OR LOWER? OR DIMINISH

? OR DECREAS?) (2A) (PRESS# OR PRESSUR?)

L20 52745 SEA VACUUM? OR EVACUAT? OR VACUO# OR INVACUO# OR (NEG# OR  
NEGATIV? OR REDUC? OR REDN# OR LOW OR LOWER? OR DIMINISH  
? OR DECREAS?) (2A) (PRESS# OR PRESSUR?)

TOTAL FOR ALL FILES

L21 442164 SEA VACUUM? OR EVACUAT? OR VACUO# OR INVACUO# OR (NEG# OR  
NEGATIV? OR REDUC? OR REDN# OR LOW OR LOWER? OR DIMINISH  
? OR DECREAS?) (2A) (PRESS# OR PRESSUR?)

L22 108656 SEA MATRIX? OR MATRICE? OR LATTIC?

L23 86282 SEA MATRIX? OR MATRICE? OR LATTIC?

L24 61714 SEA MATRIX? OR MATRICE? OR LATTIC?

L25 65717 SEA MATRIX? OR MATRICE? OR LATTIC?

TOTAL FOR ALL FILES

L26 322369 SEA MATRIX? OR MATRICE? OR LATTIC?

L27 9 SEA (L7 OR L12) AND L17

L28 0 SEA (L8 OR L13) AND L18

L29 1 SEA (L9 OR L14) AND L19

L30 1 SEA (L10 OR L15) AND L20

TOTAL FOR ALL FILES

L31 11 SEA (L11 OR L16) AND L21

L32 42 SEA (L7 OR L12) AND L6

L33 21 SEA (L8 OR L13) AND L6

L34 17 SEA (L9 OR L14) AND L6

L35 22 SEA (L10 OR L15) AND L6

TOTAL FOR ALL FILES

L36 102 SEA (L11 OR L16) AND L6

L37 3 SEA L7 AND L6

L38 0 SEA L8 AND L6

L39 1 SEA L9 AND L6

L40 2 SEA L10 AND L6

TOTAL FOR ALL FILES

L41 6 SEA L11 AND L6

L42 41 SEA L12 AND L6

L43 21 SEA L13 AND L6

L44 16 SEA L14 AND L6

L45 20 SEA L15 AND L6

TOTAL FOR ALL FILES

L46 98 SEA L16 AND L6

L47 0 SEA L42 AND L22

L48 0 SEA L43 AND L23

L49 0 SEA L44 AND L24

L50 0 SEA L45 AND L25

TOTAL FOR ALL FILES

L51 0 SEA L46 AND L26

L52 2 SEA L42 AND L7 AND L12

L53 0 SEA L43 AND L8 AND L13

L54 0 SEA L44 AND L9 AND L14

L55 0 SEA L45 AND L10 AND L15

TOTAL FOR ALL FILES

L56 2 SEA L46 AND L11 AND L16

L57 9 SEA L42 AND TRANSPLANT?

L58 2 SEA L43 AND TRANSPLANT?  
 L59 1 SEA L44 AND TRANSPLANT?  
 L60 1 SEA L45 AND TRANSPLANT?  
 TOTAL FOR ALL FILES  
 L61 13 SEA L46 AND TRANSPLANT?  
 L62 689 SEA TRANSPLANT?(25A) (BONEMARROW? OR BONEGRAFT? OR BONE#(5  
 A) (MARROW? OR GRAFT?))  
 L63 25466 SEA TRANSPLANT?(25A) (BONEMARROW? OR BONEGRAFT? OR BONE#(5  
 A) (MARROW? OR GRAFT?))  
 L64 22712 SEA TRANSPLANT?(25A) (BONEMARROW? OR BONEGRAFT? OR BONE#(5  
 A) (MARROW? OR GRAFT?))  
 L65 27205 SEA TRANSPLANT?(25A) (BONEMARROW? OR BONEGRAFT? OR BONE#(5  
 A) (MARROW? OR GRAFT?))  
 TOTAL FOR ALL FILES  
 L66 76072 SEA TRANSPLANT?(25A) (BONEMARROW? OR BONEGRAFT? OR BONE#(5  
 A) (MARROW? OR GRAFT?))  
 L67 6 SEA L62 AND L17  
 L68 11 SEA L63 AND L18  
 L69 20 SEA L64 AND L19  
 L70 18 SEA L65 AND L20  
 TOTAL FOR ALL FILES  
 L71 55 SEA L66 AND L21  
 L72 2 SEA L67 AND L6  
 L73 0 SEA L68 AND L6  
 L74 0 SEA L69 AND L6  
 L75 0 SEA L70 AND L6  
 TOTAL FOR ALL FILES  
 L76 2 SEA L71 AND L6  
 L77 0 SEA L67 AND L22  
 L78 0 SEA L68 AND L23  
 L79 0 SEA L69 AND L24  
 L80 0 SEA L70 AND L25  
 TOTAL FOR ALL FILES  
 L81 0 SEA L71 AND L26  
 L82 1 SEA (L7 OR L12) AND L22  
 L83 19 SEA (L8 OR L13) AND L23  
 L84 22 SEA (L9 OR L14) AND L24  
 L85 24 SEA (L10 OR L15) AND L25  
 TOTAL FOR ALL FILES  
 L86 66 SEA (L11 OR L16) AND L26  
 L87 0 SEA L82 AND (L17 OR L6)  
 L88 0 SEA L83 AND (L18 OR L6)  
 L89 0 SEA L84 AND (L19 OR L6)  
 L90 0 SEA L85 AND (L20 OR L6)  
 TOTAL FOR ALL FILES  
 L91 0 SEA L86 AND (L21 OR L6)  
 L92 9 SEA L62 AND L22  
 L93 70 SEA L63 AND L23  
 L94 98 SEA L64 AND L24  
 L95 142 SEA L65 AND L25  
 TOTAL FOR ALL FILES

L96 319 SEA L66 AND L26  
 L97 0 SEA L92 AND L17  
 L98 0 SEA L93 AND L18  
 L99 0 SEA L94 AND L19  
 L100 0 SEA L95 AND L20

TOTAL FOR ALL FILES

L101 0 SEA L96 AND L21  
 L102 2 SEA L92 AND L6  
 L103 1 SEA L93 AND L6  
 L104 1 SEA L94 AND L6  
 L105 0 SEA L95 AND L6

TOTAL FOR ALL FILES

L106 4 SEA L96 AND L6

FILE 'MEDLINE' ENTERED AT 11:06:11 ON 27 MAR 1998

E BONE MARROW/CT  
 L107 57301 SEA "BONE MARROW"+NT/CT  
 E BONE MARROW TRANSPLANTATION/CT  
 L108 23055 SEA "BONE MARROW TRANSPLANTATION"+NT/CT  
 L109 10133 SEA L107 (L) TRANSPLANTATION/CT  
 E GRAFTING, BONE/CT  
 E E3+ALL/CT  
 L110 10746 SEA "BONE TRANSPLANTATION"+NT/CT  
 L111 70 SEA (L107 OR L108 OR L109 OR L110) AND L20  
 E VACUUM/CT  
 L112 715 SEA VACUUM+NT/CT  
 E ATMOSPHERIC PRESSURE/CT  
 L113 5493 SEA "ATMOSPHERIC PRESSURE"+NT/CT  
 L114 1 SEA (L107 OR L108 OR L109 OR L110) AND L112  
 L115 28 SEA (L107 OR L108 OR L109 OR L110) AND L113  
 L116 0 SEA L115 AND L25  
 L117 0 SEA L115 AND L6  
 L118 0 SEA L111 AND L6  
 L119 2 SEA L111 AND L25  
 L120 42 SEA L111 AND L107  
 L121 12 SEA L111 AND L108  
 L122 4 SEA L111 AND L109  
 L123 21 SEA L111 AND L110  
 L124 4 SEA L120 AND L121  
 L125 0 SEA L120 AND L123  
 L126 1 SEA L121 AND L123  
 L127 0 SEA (L120 OR L121 OR L123) AND L10  
 L128 0 SEA (L120 OR L121 OR L123) AND L15  
 L129 13 SEA (L120 OR L121 OR L123) AND L65  
 L130 12 SEA L30 OR L40 OR L60 OR L114 OR L119 OR L122 OR L124 OR  
 L126  
 L131 8 SEA L129 NOT L130  
 L132 5 SEA L70 NOT (L130 OR L131)  
 L133 27 SEA L115 NOT (L130 OR L131 OR L132)

FILE 'EMBASE' ENTERED AT 11:22:59 ON 27 MAR 1998

L134 4 SEA L29 OR L39 OR L59 OR L104  
L135 20 SEA L69 NOT L134

FILE 'BIOSIS' ENTERED AT 11:23:49 ON 27 MAR 1998

L136 3 SEA L58 OR L103  
L137 11 SEA L68 NOT L136

FILE 'WPIDS' ENTERED AT 11:24:33 ON 27 MAR 1998

L138 27 SEA L27 OR L37 OR L52 OR L57 OR L67 OR L72 OR L82 OR L102

=> file biosis

FILE 'BIOSIS' ENTERED AT 11:29:47 ON 27 MAR 1998  
COPYRIGHT (C) 1998 BIOSIS(R)

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNS) PRESENT  
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 20 March 1998 (980320/ED)

CAS REGISTRY NUMBERS (R) LAST ADDED: 20 March 1998 (980320/UP)

=> d l136 1-3 all

L136 ANSWER 1 OF 3 BIOSIS COPYRIGHT 1998 BIOSIS

AN 95:364093 BIOSIS

DN 98378393

TI HCMV pp65 antigenemia assay using indirect alkaline phosphatase staining method.

AU Kurihara T; Hayashi J; Matsuoka T; Ito A

CS R D Cent., Yuka Medias Co. Ltd., Ami, Inashiki, Ibaraki 300-03, Japan

SO Biomedical Research (Tokyo) 16 (2). 1995. 125-129. ISSN: 0388-6107

LA English

PR Biological Abstracts Vol. 100 Iss. 005 Ref. 070231

AB The purpose of this study was to investigate several factors affecting the sensitivity of human cytomegalovirus (HCMV) antigenemia assay using indirect alkaline phosphatase staining method for HCMV antigen in peripheral blood polymorphonuclear leukocytes. A mixture of two monoclonal antibodies directed against the HCMV lower **matrix** protein (pp65) was used for detecting HCMV antigen in cytocentrifuged blood leukocytes. Major factors affecting the sensitivity were incubation temperature, washing **solution**, **diluent** buffer for monoclonal antibodies, and second antibody. In particular, utilization of alkaline phosphatase-labeled goat anti-mouse antibody as second antibody gave significantly better results in terms of background staining. Using the assay under the optimized condition, one single positive cell among 150,000 antigen-negative polymorphonuclear leukocytes was detectable. Of 83 blood samples from 36 **bone marrow transplant** recipients examined, 50 samples were concordantly

negative and 30 concordantly positive for indirect alkaline phosphatase staining and conventional alkaline phosphatase-anti-alkaline phosphatase (APAAP) staining. The sensitivity and specificity of indirect alkaline phosphatase staining against APAAP method were 96.7% (30/31) and 96.1% (50/52), respectively. A significant correlation was found between the number of positive cells detected by indirect staining and APAAP staining ( $r_s = 0.917$ , Spearman test). When the number of infected polymorphonuclear leukocytes per  $1.5 \times 10^5$  cells was more than 3, both staining methods gave concordant positive results. This rapid and sensitive method will be valuable for detection of HCMV antigen without any background staining.

ST RESEARCH ARTICLE; HUMAN; HUMAN CYTOMEGALOVIRUS; PERIPHERAL BLOOD POLYMORPHONUCLEAR LEUKOCYTE; IMMUNOLOGIC METHOD; ANALYTICAL METHOD; ENZYMATIC METHOD

RN 9001-78-9 (ALKALINE PHOSPHATASE)

CC Cytology and Cytochemistry-Human \*02508

Biochemical Methods-Proteins, Peptides and Amino Acids \*10054

Biochemical Studies-Proteins, Peptides and Amino Acids 10064

Enzymes-Methods \*10804

Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and Reticuloendothelial System \*15008

Virology-Animal Host Viruses \*33506

Immunology and Immunochemistry-General; Methods \*34502

Immunology and Immunochemistry-Immunopathology, Tissue Immunology \*34508

Medical and Clinical Microbiology-Virology \*36006

BC Herpesviridae 02612

Hominidae 86215

L136 ANSWER 2 OF 3 BIOSIS COPYRIGHT 1998 BIOSIS

AN 89:96552 BIOSIS

DN BA87:50688

TI THE RECONSTRUCTION SURGERY FOR THE THORACIC SKELETON WITH THE HOMOLOGOUS RIB **TRANSPLANTATION**.

AU KONDOH D; GOYA T; TSUCHIYA R; FUJIWARA Y; KOIKE K; FUTAMI T; NISHIZAWA N; NARUKE T; YONEYAMA T; SUEMASU K

CS DEP. SURGERY, NATL. CANCER CENT., TOKYO, JPN.

SO J JPN ASSOC THORAC SURG 36 (9). 1988. 2073-2078. CODEN: NKZAA Y ISSN: 0369-4739

LA Japanese

AB From May 1984 to March, 1987 the reconstruction surgery for the thoracic skeleton with the homologous rib **transplantation** has been performed in 5 cases (3 males and 2 females whose age ranged 25 to 75 years) at the National Cancer Center. These 5 patients had a recurrent malignant fibrous histiocytoma, a recurrent breast cancer, a recurrent invasive thymoma, a primary lung cancer, and a recurrent rhabdomyosarcoma, respectively and all of them underwent the wide resection of antero-lateral chest wall. The homologous rib used as an allograft was the 5th rib resected from other patients during the standard operation for the lung cancer. Resected ribs were freezed at

temperatures of -20 .degree. C immediately after the resection and preserved until the day before the operation. The frozen rib was immersed in a **solution** of 1% Hixitane gluconate for 12 hours and was defrosted. Following this procedure, the rib was immersed in a **solution** containing 3 g of kanamycin in 500 ml of normal saline, and the periosteum and the **bone marrow** were removed. The overall result of the reconstruction surgery was almost satisfactory in terms of the maintenance of adequate ventilation in the postoperative period, except for one case, in which the respiratory support was needed for slightly abnormal ventilation only on the first night after the operation. Although neither infection nor rejection were clinically observed, the three kinds of postoperative complication were noted. These were the fracture of allograft, the fracture of the 5th thoracic vertebra caused presumably due to the deformity of the reconstructed thorax and the separation of the connection between the end of the allografts and the recipient's bone. It is considered these complications were clinically minor, however, the improvement of the operation procedure would prevent these complications. In both Europe and U.S.A., the allograft is a commonplace procedure in which cadaver bone is usually used, while, in Japan, the use of cadaver bone is very difficult. Nevertheless, the reconstruction of the thoracic skeleton with homologous rib **transplantation** is technically simple and a very useful procedure.

ST HUMAN ALLOGRAFT MALIGNANT FIBROUS HISTIOCYTOMA RECURRENT  
 RHABDOMYOSARCOMA BREAST CANCER INVASIVE THYMOMA LUNG CANCER  
 CC External Effects-Temperature as a Primary Variable-Cold 10616  
 Anatomy and Histology, General and Comparative-Surgery \*11105  
 Anatomy and Histology, General and Comparative-Regeneration and  
 Transplantation \*11107  
 Pathology, General and Miscellaneous-Therapy 12512  
 Blood, Blood-Forming Organs and Body Fluids-Blood, Lymphatic and  
 Reticuloendothelial Pathologies \*15006  
 Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and  
 Reticuloendothelial System \*15008  
 Respiratory System-Pathology \*16006  
 Reproductive System-Pathology \*16506  
 Muscle-Pathology \*17506  
 Bones, Joints, Fasciae, Connective and Adipose Tissue-General;  
 Methods \*18001  
 Bones, Joints, Fasciae, Connective and Adipose Tissue-Pathology  
 \*18006  
 Temperature: Its Measurement, Effects and Regulation-Cryobiology  
 23004  
 Neoplasms and Neoplastic Agents-Therapeutic Agents; Therapy \*24008  
 BC Hominidae 86215

L136 ANSWER 3 OF 3 BIOSIS COPYRIGHT 1998 BIOSIS  
 AN 78:214992 BIOSIS  
 DN BA66:27489  
 TI A **SOLUTION** TO THE GRAFT VS HOST PROBLEM IN BONE MARROW

**TRANSPLANTATION TO HUMANS.**

AU KAST R E  
 CS IMMUNOL. LAB., STATENS SERUMINST., 2300 COPENHAGEN S, DEN.  
 SO MED HYPOTHESES 4 (2). 1978 173-177. CODEN: MEHYDY ISSN: 0306-9877  
 LA English  
 AB A system for specific abrogation of graft vs host disease after xenogeneic bone marrow **transplantation** to humans was presented. In this system, prospective patient cells are removed by skin biopsy, for example, and injected into a fetal chimpanzee. The fetal chimpanzee becomes tolerant to this patient's antigens and will not attack or reject them when its **bone marrow** is **removed** after birth and injected into the specific patient from whom the tolerogenic cells were obtained. A simple and straightforward experimental test of this system's clinical applicability was also presented.  
 ST CHIMPANZEE TOLERANCE  
 CC Genetics and Cytogenetics-Animal 03506  
 Genetics and Cytogenetics-Human 03508  
 Anatomy and Histology, General and Comparative-Experimental Anatomy 11104  
 Anatomy and Histology, General and Comparative-Regeneration and Transplantation \*11107  
 Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and Reticuloendothelial System \*15008  
 Bones, Joints, Fasciae, Connective and Adipose Tissue-General; Methods \*18001  
 Integumentary System-General; Methods 18501  
 Developmental Biology-Embryology-Experimental 25504  
 Immunology and Immunochemistry-Immunopathology, Tissue Immunology \*34508  
 BC Hominidae 86215  
 Pongidae 86235

=> d 1137 1-11 ti

L137 ANSWER 1 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS

TI C1 esterase inhibitor concentrate for capillary leakage syndrome following **bone marrow transplantation**.

L137 ANSWER 2 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS

TI Neurological complication following total hip arthroplasty under catheter epidural anaesthesia.

L137 ANSWER 3 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS

TI Evaluation of airborne particulates and fungi during hospital renovation.

L137 ANSWER 4 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS

TI Prophylaxis of **bone marrow transplant** nephropathy with captopril, an inhibitor of angiotensin-converting enzyme.



L137 ANSWER 5 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS  
 TI REMISSION OF PHILADELPHIA POSITIVE CHRONIC MYELOGENOUS LEUKEMIA  
 ASSOCIATED WITH T3 21 AFTER **BONE MARROW**  
**TRANSPLANTATION.**

L137 ANSWER 6 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS  
 TI TREATMENT OF CYCLOPHOSPHAMIDE-INDUCED HEMORRHAGIC CYSTITIS WITH  
 INTRAVESICAL CARBOPROST TROMETHAMINE.

L137 ANSWER 7 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS  
 TI TRANSMISSION OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 FROM A  
 SERONEGATIVE ORGAN AND TISSUE DONOR.

L137 ANSWER 8 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS  
 TI PSEUDOEPIDEMIC OF ASPERGILLOSIS AFTER DEVELOPMENT OF PULMONARY  
 INFILTRATES IN A GROUP OF **BONE MARROW**  
**TRANSPLANT** PATIENTS.

L137 ANSWER 9 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS  
 TI HYPERTENSION AFTER RENAL TRANSPLANTATION A COMPARISON OF CYCLOSPORINE  
 AND CONVENTIONAL IMMUNOSUPPRESSION.

L137 ANSWER 10 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS  
 TI HISTO PATHOLOGY OF THE LUNG AFTER **BONE MARROW**  
**TRANSPLANTATION.**

L137 ANSWER 11 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS  
 TI CONTINUOUS **NEGATIVE PRESSURE** AS AN ALTERNATIVE  
 METHOD OF TREATING SEVERE HYPOXEMIA.

=> d l137 11 all

L137 ANSWER 11 OF 11 BIOSIS COPYRIGHT 1998 BIOSIS  
 AN 77:102761 BIOSIS  
 DN BR13:102761  
 TI CONTINUOUS **NEGATIVE PRESSURE** AS AN ALTERNATIVE  
 METHOD OF TREATING SEVERE HYPOXEMIA.  
 AU PETERSEN D; HARRISON D; HUDSON L  
 SO AM REV RESPIR DIS 115 (4 PART 2). 1977 148 CODEN: ARDSBL ISSN:  
 0003-0805  
 DT Conference  
 LA Unavailable  
 ST **ABSTRACT HUMAN BONE MARROW TRANSPLANTS**  
**IMMUNO SUPPRESSED INTERSTITIAL PNEUMONIA**  
 CC Biochemistry-Gases \*10012  
 Anatomy and Histology, General and Comparative-Regeneration and  
 Transplantation \*11107  
 Pathology, General and Miscellaneous-Therapy 12512  
 Blood, Blood-Forming Organs and Body Fluids-Blood and Lymph Studies  
 \*15002

Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and  
 Reticuloendothelial System \*15008  
 Respiratory System-General; Methods \*16001  
 Respiratory System-Pathology \*16006  
 Bones, Joints, Fasciae, Connective and Adipose Tissue-General;  
 Methods 18001  
 Immunology and Immunochemistry-Immunopathology, Tissue Immunology  
 \*34508

BC Hominidae 86215

=> file embase

FILE 'EMBASE' ENTERED AT 11:31:47 ON 27 MAR 1998

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FILE COVERS 1974 TO 26 Mar 1998 (19980326/ED)

This file contains CAS Registry Numbers for easy and accurate  
 substance identification.

=> d l134 1-4 ti so ab ct

L134 ANSWER 1 OF 4 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Immune response to nonspecific and altered tissue antigens in soft  
 tissue allografts.

SO Clinical Orthopaedics and Related Research, (1996) /326 (80-85).  
 ISSN: 0009-921X CODEN: CORTBR

AB Soft tissue allografts have many uses in orthopaedic surgery,  
 including knee ligament reconstruction, hand tendon surgery,  
 shoulder instability, and rotator cuff reconstruction. The  
 predictable biologic incorporation of soft tissue allografts without  
 rejection or fear of disease transmission continues to be a goal of  
 basic science researchers. A review of the current knowledge of the  
 immune system response to donor specific, nonspecific, and altered  
 tissue antigens in soft tissue or tendon allografts is presented. An  
 in vitro study was done in an attempt to decrease immunogenicity of  
 a frozen bone- ligament graft by adding  
 irrigation with Betadine scrub solution and  
 hydrogen peroxide to the conventional storage process of freezing.  
 Although the irrigation with cytotoxic agents would undoubtedly  
 further decrease immunogenicity, it also decreased stiffness and  
 maximum load by 15%. Whether this decreased strength and stiffness  
 would compromise the incorporation and long term success of soft  
 tissue allografts would need to be studied by in vivo experiments.

CT EMTAGS: soft tissue (0966); cell, tissue or organ culture (0103);  
 musculoskeletal system (0960); ligament (0964); mammal (0738); human  
 (0888); nonhuman (0777); controlled study (0197); human tissue,  
 cells or cell components (0111); animal tissue, cells or cell  
 components (0105); priority journal (0007); conference paper (0061)  
 Medical Descriptors:

\*soft tissue

\*allograft

\*immune response  
bone allograft  
tendon graft  
antigenicity  
tissue culture  
cytotoxicity  
cell viability  
knee ligament  
strength  
biomechanics  
human  
nonhuman  
controlled study  
human tissue  
human cell  
animal tissue  
animal cell  
priority journal  
conference paper  
Drug Descriptors:  
\*tissue antigen  
povidone iodine  
hydrogen peroxide  
cytotoxic agent  
octoxinol  
alcohol

L134 ANSWER 2 OF 4 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI HCMV pp65 antigenemia assay using indirect alkaline phosphatase staining method.

SO Biomedical Research, (1995) 16/2 (125-129).  
ISSN: 0388-6107 CODEN: BRES5

AB The purpose of this study was to investigate several factors affecting the sensitivity of human cytomegalovirus (HCMV) antigenemia assay using indirect alkaline phosphatase staining method for HCMV antigen in peripheral blood polymorphonuclear leukocytes. A mixture of two monoclonal antibodies directed against the HCMV lower matrix protein (pp65) was used for detecting HCMV antigen in cytocentrifuged blood leukocytes. Major factors affecting the sensitivity were incubation temperature, washing solution, diluent buffer for monoclonal antibodies, and second antibody. In particular, utilization of alkaline phosphatase-labeled goat anti-mouse antibody as second antibody gave significantly better results in terms of background staining. Using the assay under the optimized condition, one single positive cell among 150,000 antigen-negative polymorphonuclear leukocytes was detectable. Of 83 blood samples from 36 bone marrow transplant recipients examined, 50 samples were concordantly negative and 30 concordantly positive for indirect alkaline phosphatase staining and conventional alkaline phosphatase-anti-alkaline phosphatase (APAAP) staining. The

sensitivity and specificity of indirect alkaline phosphatase staining against APAAP method were 96.7% (30/31) and 96.1% (50/52), respectively. A significant correlation was found between the number of positive cells detected by indirect staining and APAAP staining ( $r_s = 0.917$ , Spearman test). When the number of infected polymorphonuclear leukocytes per  $1.5 \times 10^5$  cells was more than 3, both staining methods gave concordant positive results. This rapid and sensitive method will be valuable for detection of HCMV antigen without any background staining.

CT EMTAGS: virus (0761); immunological procedures (0102); histology (0330); blood and hemopoietic system (0927); diagnosis (0140); infection (0310); mammal (0738); human (0888); major clinical study (0150); controlled study (0197); human tissue, cells or cell components (0111); article (0060); enzyme (0990)

Medical Descriptors:

\*human cytomegalovirus

\*immunohistochemistry

neutrophil

leukocyte

diagnostic accuracy

temperature

cytomegalic inclusion body disease: DI, diagnosis

human

major clinical study

controlled study

human tissue

human cell

article

Drug Descriptors:

\*virus protein

\*alkaline phosphatase

virus antigen

monoclonal antibody

buffer

L134 ANSWER 3 OF 4 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Recent studies of bone appetite in cattle.

SO ACTA PHYSIOL. SCAND. SUPPL., (1989) 136/583 (53-58).

ISSN: 0302-2994 CODEN: APSSAD

AB Cows depleted of phosphorus by loss of saliva from a parotid fistula and low dietary phosphate developed an avid appetite for bones. The behaviour is innate and predominantly cued by olfactory stimuli. Meat, blood or fat were not attractive and bones became more attractive after aging for 1.5-2.0 years. The appetite was also shown for guano-derived rock phosphate and bird excreta. There was no interest in inorganic calcium and phosphate salts or ashed bone. The attractant is therefore an organic constituent of aging bone and was found to be at highest concentration in the marrow fraction. Water, ether and vacuum distillation extracts of old bone or marrow, added to unattractive materials e.g., ashed bone, rendered them attractive. The residues

of such extraction were of diminished interest. The attractiveness of the fractionated extracts was highest in the neutral fraction. The bone appetite was abolished by increasing the phosphate concentration in plasma but not in cerebrospinal fluid. The phosphate concentration in the blood appears, therefore, to regulate the bone appetite. The sensors could be in brain regions without a blood-brain barrier. Chronic severe phosphorus deficiency was associated with bone resorption, reduced osteoblastic and hemopoietic activities, and abnormal blood progesterone cycles.

CT EMTAGS: bone (0962); cattle (0707); histology (0330); ultrastructure analysis and electron microscopy (0320); controlled study (0197); animal experiment (0112); animal tissue, cells or cell components (0105); nonhuman (0777); chemical procedures (0107); priority journal (0007)

Medical Descriptors:

- \*phosphorus depletion
- \*osteolysis
- \*osteoporosis
- \*progesterone
- \*phosphate blood level
- \*bone
- cattle
- cytology
- ultrastructure

L134 ANSWER 4 OF 4 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Bone alloplasty of a segmental defect of the mandible.

SO STOMATOLOGIYA (MOSCOW), (1981) 60/4 (8-10).

CODEN: STOAAT

AB Experiments on 35 dogs and 60 rabbits, as well as an analysis of observation of 9 human patients point to expedience of substituting autogenous for allogeneous bone marrow in allotransplants. It is suggested that before the transplantation the allotransplants should be washed in solutions of antibiotics, so as to remove the foreign bone

marrow. This contributes to a reduction of the antigenic activity of the bone, removal of the preservative residues and additional sterilization. The stimulation of the allotransplant osteogenic activity by adding the autogenous bone marrow does not involve additional trauma and is well tolerated by patients.

CT EMTAGS: bone (0962); theoretical study (0110); animal experiment (0112); case report (0151); therapy (0160)

Medical Descriptors:

- \*mandible defect
- \*homotransplantation
- \*mandible reconstruction
- bone reconstruction

=> d 1135 1-20 ti

L135 ANSWER 1 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Efficacy of amlodipine in pediatric **bone marrow transplant** patients.

L135 ANSWER 2 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI C1 esterase inhibitor concentrate for capillary leakage syndrome following **bone marrow transplantation**.

L135 ANSWER 3 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI [Neurological complication following total hip arthroplasty under catheter epidural anaesthesia].  
NEUROLOGISCHE KOMPLIKATION NACH TOTALENDOPROTHESENIMPLANTATION DER HUFTE IN KATHETERPERIDURALANASTHESIE.

L135 ANSWER 4 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Intravesicular carboprost for the treatment of hemorrhagic cystitis after marrow transplantation.

L135 ANSWER 5 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Cyclosporine neurotoxicity and its relationship to hypertensive encephalopathy: CT and MR findings in 16 cases.

L135 ANSWER 6 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Evaluation of airborne particulates and fungi during hospital renovation.

L135 ANSWER 7 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Prophylaxis of **bone marrow transplant** nephropathy with captopril, an inhibitor of angiotensin-converting enzyme.

L135 ANSWER 8 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Remission of Philadelphia positive chronic myelogenous leukemia associated with t(3;21) after **bone marrow transplantation**.

L135 ANSWER 9 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Treatment of cyclophosphamide-induced hemorrhagic cystitis with intravesical carboprost tromethamine.

L135 ANSWER 10 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Effective early treatment of hepatic venoocclusive disease with a central splenorenal shunt in an infant.

L135 ANSWER 11 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Transmission of human immunodeficiency virus type 1 from a seronegative organ and tissue donor.

L135 ANSWER 12 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI [Four years after Chernobyl: The medical repercussions].  
QUATRE ANS APRES TCHERNOBYL: LES RETOMBEES MEDICALES.

L135 ANSWER 13 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Orbital aspergillosis. Conservative debridement and local amphotericin irrigation.

L135 ANSWER 14 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Radiation damage aspects of the Chernobyl accident.

L135 ANSWER 15 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Immediate medical consequences of nuclear accidents. Lessons from Chernobyl.

L135 ANSWER 16 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Pseudoepidemic of aspergillosis after development of pulmonary infiltrates in a group of **bone marrow transplant** patients.

L135 ANSWER 17 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Hypertension after renal transplantation. A comparison of cyclosporine and conventional immunosuppression.

L135 ANSWER 18 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Histopathology of the lung after **bone marrow transplantation**.

L135 ANSWER 19 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI [Wound infection and treatment in accident surgery].  
 WUNDINFEKTION UND IHRE BEHANDLUNG IN DER UNFALLCHIRURGIE.

L135 ANSWER 20 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Freeze drying for the preservation of human tissues.

=> d l135 13,19 ti so ab ct

L135 ANSWER 13 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Orbital aspergillosis. Conservative debridement and local amphotericin irrigation.

SO OPHTHALMIC PLAST. RECONSTR. SURG., (1989) 5/3 (207-211).  
 ISSN: 0740-9303 CODEN: OPRSEU

AB A patient maintained on long-term immunosuppressive agents after **bone marrow transplantation** developed an Aspergillus abscess in the right orbit. The abscess was resected without visual compromise and the orbit was irrigated regularly with amphotericin B via an indwelling catheter. Follow-up computed tomography, surgical exploration, and histological analysis demonstrated suppression of fungal growth in the orbit. Persistent fungus was recovered from nonirrigated sinuses despite their previous surgical **evacuation** and continued systemic amphotericin B administration. Treatment of orbital aspergillosis should include surgical reduction of the local fungal inoculum, supplementation of intravenous antifungal agents with local delivery to minimize systemic toxicity, and attempts to reverse the

immunosuppression. If the last is not possible, extensive extirpation of normal surrounding tissues will not prevent repopulation by the ubiquitous fungus.

CT EMTAGS: therapy (0160); fungus (0763); malignant neoplastic disease (0306); blood and hemopoietic system (0927); case report (0151); human (0888); infection (0310); female (0042); intravenous drug administration (0182); regional perfusion (0284)

Medical Descriptors:

\*orbit abscess: DT, drug therapy

\*orbit abscess: SU, surgery

\*aspergillus

\*debridement

leukemia

Drug Descriptors:

\*amphotericin b: DT, drug therapy

\*amphotericin b: AD, drug administration

L135 ANSWER 19 OF 20 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI [Wound infection and treatment in accident surgery].

WUNDINFEKTION UND IHRE BEHANDLUNG IN DER UNFALLCHIRURGIE.

SO LANGENBECKS ARCH. CHIR., (1982) Vol. 358 (179-185).

CODEN: LAACBS

AB A so-called atraumatic operative technique is required to prevent post-traumatic wound infection. Especially in open fractures, closing a wound can lead to infection despite tension at the wound edges. Postoperative hematomas may also lead to infection, whereupon a further operation is necessary. Palliative treatment of the acute stages of infection consists in immediate **evacuation**, drainage and careful debridement. The wound must be closed without dead space remaining, but when this proves impossible the dead space may be filled with a vascularized pedicle graft from adjacent muscle. The treatment of chronic infection, often accompanied by loss of skin and bone substance, has been improved by microsurgical techniques that allow the combination of autogenous **bone grafting** with vascularized musculocutaneous flap **transplantation**. Acute empyema requires early synovectomy.

CT EMTAGS: injury (0301); infection (0310); diagnosis (0140); therapy (0160); clinical article (0152); human (0888); microorganism (0724)

Medical Descriptors:

\*wound infection

\*trauma

open fracture

=> file medline

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=> d 1130 1-12 all

L130 ANSWER 1 OF 12 MEDLINE

AN 97175719 MEDLINE

DN 97175719

TI Reconstitution of stretch-activated cation channels by expression of the alpha-subunit of the epithelial sodium channel cloned from osteoblasts [published erratum appears in Proc Natl Acad Sci U S A 1997 Apr 15;94(8):4233].

AU Kizer N; Guo X L; Hruska K

CS Renal Division, Barnes-Jewish Hospital, Washington University Medical Center, St. Louis, MO 63110, USA.

NC AR 39561 (NIAMS)

SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1997 Feb 4) 94 (3) 1013-8.  
Journal code: PV3. ISSN: 0027-8424.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Cancer Journals; Priority Journals

EM 199705

AB Osteoblasts respond to repetitive strain by activating stretch-activated, nonselective cation channels (SA-CAT) and increasing matrix protein production. SA-CAT channels are thought to be responsible for mechano-transduction in osteoblasts, although the molecular identity of the SA-CAT channel has previously been unknown. We have demonstrated that both the UMR-106 osteoblast-like cell line and human osteoblasts in primary culture express the alpha-subunit of the epithelial sodium channel (alpha-ENaC). The ENaC gene product is closely related to a class of proteins that confer touch sensitivity to *Caenorhabditis elegans* and are referred to as degenerins. A cDNA clone was obtained of the entire coding region of rat alpha-ENaC (alpha-rENaC). Sequence analysis indicated that the osteoblast clone's sequence was identical to that originally cloned from rat colon. The alpha-rENaC cDNA was cloned into an expression plasmid and transfected into LM(TK-) cells, a null cell for SA-CAT activity. Stable transfectants expressed mRNA and the expected 74-kDa protein corresponding to alpha-rENaC. Reconstitution of alpha-rENaC resulted in the expression of a  $24.2 \pm 1.0$  psec SA-CAT channel ( $P(\text{Na}):P(\text{K}) = 1.1 \pm 0.1$ ). The channel is calcium permeable ( $P(\text{Na}):P(\text{Ca}) = 1.4 \pm 0.1$ ) and highly selective for cations over anions ( $P(\text{Na}):P(\text{Cl}) \gg 20$ ). The channel is only active after negative pressure is applied to cell attached patches, cell swelling, or patch excision. These results represent the first heterologous expression of an SA-CAT channel in a mammalian cell system and provide evidence that the ENaC/degenerin family of proteins are capable of mediating both transepithelial sodium transport and are

involved in signal transduction by mechano-sensitive cells such as osteoblasts.

CT Check Tags: Animal; Human; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Amiloride: PD, pharmacology

**Bone Marrow**

Calcium: ME, metabolism

Cations: ME, metabolism

Cells, Cultured

Cloning, Molecular

Gene Expression

Osteoblasts: ME, metabolism

\*Osteoblasts: PH, physiology

Patch-Clamp Techniques

RNA, Messenger: AN, analysis

Rats

Restriction Mapping

\*Sodium Channels: GE, genetics

\*Sodium Channels: PH, physiology

Stress, Mechanical

RN 2609-46-3 (Amiloride); 7440-70-2 (Calcium)

CN 0 (Cations); 0 (RNA, Messenger); 0 (Sodium Channels)

L130 ANSWER 2 OF 12 MEDLINE

AN 97014745 MEDLINE

DN 97014745

TI Induced healing of aneurysmal bone cysts by demineralized bone particles. A report of two cases.

AU Delloye C; De Nayer P; Malghem J; Noel H

CS Department of Orthopaedic Surgery, St-Luc University Clinics, Bruxelles, Belgium.

SO ARCHIVES OF ORTHOPAEDIC AND TRAUMA SURGERY, (1996) 115 (3-4) 141-5.

Journal code: AT2. ISSN: 0936-8051.

CY GERMANY: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199708

EW 19970801

AB Two cases of induced healing of aneurysmal bone cyst (ABC) following intralesional implantation of a bone paste made of autogeneic bone marrow and allogeneic bone powder are reported. The calcaneum in one case and the superior pubic ramus in the other were blown out by an ABC and would have required extensive surgery. Via a minimal exposure, the cyst was partially evacuated and filled with an admixture of a partially demineralized bone particles with bone marrow. Ossification of the peripheral shell was the first sign of healing and was observed within the first 3 postoperative months. Successful healing was observed in both cases. The rationale underlying this intralesional treatment was that the bone grafting material might reverse ABC expansion by promoting ossification

through a bone induction mechanism. The concept of this treatment was to retain the ABC tissue, using its own intrinsic osteogenic potential to promote healing. By triggering intralesional new bone formation, the bone paste represented an effective means to reverse the expanding phase of ABC. The particulated bone allograft was easy to handle and to introduced in an irregular cavity. Moreover, as a complete cyst **evacuation** was not required, a minimal surgical approach could be used so that the risks and morbidity associated with an extensive approach were reduced. Its use is of particular interest in poorly accessible areas like the pelvis and spine.

CT Check Tags: Case Report; Female; Human  
 Adolescence  
 Adult  
 Bone Cysts, Aneurysmal: PP, physiopathology  
 \*Bone Cysts, Aneurysmal: SU, surgery  
 \*Bone Marrow Transplantation: MT, methods  
 \*Bone Transplantation: MT, methods  
 Calcaneus: RA, radiography  
 Calcaneus: SU, surgery  
 \*Osteogenesis  
 Pubic Bone: RA, radiography  
 Pubic Bone: SU, surgery

L130 ANSWER 3 OF 12 MEDLINE

AN 96208082 MEDLINE

DN 96208082

TI Immune response to nonspecific and altered tissue antigens in soft tissue allografts.

AU Pinkowski J L; Rodrigo J J; Sharkey N A; Vasseur P B

CS Northeast Ohio Orthopaedic Associates, Northeast Ohio Universities, College of Medicine, Akron, USA.

SO CLINICAL ORTHOPAEDICS AND RELATED RESEARCH, (1996 May) (326) 80-5. Journal code: DFY. ISSN: 0009-921X.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 199608

AB Soft tissue allografts have many uses in orthopaedic surgery, including knee ligament reconstruction, hand tendon surgery, shoulder instability, and rotator cuff reconstruction. The predictable biologic incorporation of soft tissue allografts without rejection or fear of disease transmission continues to be a goal of basic science researchers. A review of the current knowledge if the immune system response to donor specific, nonspecific, and altered tissue antigens in soft tissue or tendon allografts is presented. An in vitro study was done in an attempt to decrease immunogenicity of a frozen bone-ligament graft by adding irrigation with Betadine scrub solution and hydrogen peroxide to the conventional storage process of freezing.

Although the irrigation with cytotoxic agents would undoubtedly further decrease immunogenicity, it also decreased stiffness and maximum load by 15%. Whether this decreased strength and stiffness would compromise the incorporation and long term success of soft tissue allografts would need to be studied by in vitro experiments.

CT Check Tags: Human  
 Anti-Infective Agents, Local: PD, pharmacology  
 Biomechanics  
 \*Bone Transplantation: IM, immunology  
 Cells, Cultured  
 Ethanol: PD, pharmacology  
 Fibroblasts: DE, drug effects  
 Hydrogen Peroxide: PD, pharmacology  
 Irrigation  
 Ligaments, Articular: IM, immunology  
 Ligaments, Articular: PH, physiology  
 \*Ligaments, Articular: TR, transplantation  
 Povidone-Iodine: PD, pharmacology  
 Tissue Preservation  
 Transplantation, Homologous  
 RN 25655-41-8 (Povidone-Iodine); 64-17-5 (Ethanol); 7722-84-1 (Hydrogen Peroxide)  
 CN 0 (Anti-Infective Agents, Local)

L130 ANSWER 4 OF 12 MEDLINE

AN 90289421 MEDLINE

DN 90289421

TI [Effects of different sterilizing techniques on osseous regeneration of grafted lyophilized cartilage].

Einfluss unterschiedlicher Sterilisationsverfahren auf die ossare Regeneration allogener gefriergetrockneter Knorpelimplantate.

AU Bumann A; Eickbohm J E; Kopp S; Wangerin K

SO ZEITSCHRIFT FUR STOMATOLOGIE, (1989 Sep) 86 (5) 249-57.

Journal code: ZFS. ISSN: 0175-7784.

CY Austria

DT Journal; Article; (JOURNAL ARTICLE)

LA German

FS Dental Journals; Dental

EM 199009

AB The suitability of variably sterilized lyocartilage

grafts as potential bone substitutes was

investigated in animal experiments with special attention to configurational stability. In 3 Beagles corticocancellous implant beds were prepared by box-type ostectomies and lyophilized costal cartilage blocks sterilized with X-rays, ethylene oxide gas and beta-propiolactone solution were placed into them.

Implants sterilized with X-rays and beta-propiolactone appeared to be unsuited for recontouring facial bone defects, since they showed complete loss of configuration after a follow-up time of 125 and 230 days, respectively. By contrast, cartilage implants sterilized with ethylene oxide gas retained their configuration after no less than

328 days. In light of these results, methods for sterilizing other biomaterials should be re-considered.

CT Check Tags: Animal; Comparative Study

\*Bone Regeneration

\*Cartilage: TR, transplantation

Dogs

English Abstract

Ethylene Oxide

Freeze Drying

Propiolactone

\*Sterilization: MT, methods

X-Rays

RN 57-57-8 (Propiolactone); 75-21-8 (Ethylene Oxide)

L130 ANSWER 5 OF 12 MEDLINE

AN 90101858 MEDLINE

DN 90101858

TI Modern cementing techniques. An experimental study of vacuum insertion of bone cement.

AU Draenert K

SO ACTA ORTHOPAEDICA BELGICA, (1989) 55 (3) 273-93. Ref: 137

Journal code: 1G2. ISSN: 0001-6462.

CY Belgium

DT Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LA English

EM 199004

AB The results of these experiments show that an increase in the intramedullary pressure (IMP) can lead to embolization of bone marrow contents via the venous drainage system along the linea aspera. A vacuum applied distally to the medullary canal is very effective for filling the diaphyseal tube with cement. The cancellous bone honeycombs of the proximal metaphysis, however, can only be filled if the bone sponge is tunneled at the level of the femoral calcar; a proximal vacuum then yields filling of the cancellous bone framework with bone cement. In order to fill the weight-bearing spongy framework of the pelvic bone with cement, the acetabular cavity should be sealed with a rubber ring and vacuum applied proximo-laterally to the ilium, thereby giving an extremely high suction pressure.

CT Check Tags: Animal; Human

\*Bone Cements: AD, administration & dosage

Bone Marrow

Embolism, Fat: ET, etiology

Embolism, Fat: PC, prevention & control

\*Femur: SU, surgery

Heart: PH, physiology

Ilium: SU, surgery

Rabbits

Respiration

Suction

Vacuum

CN 0 (Bone Cements)

L130 ANSWER 6 OF 12 MEDLINE

AN 90052592 MEDLINE

DN 90052592

TI Recent studies of bone appetite in cattle.

AU Blair-West J R; Denton D A; Nelson J F; McKinley M J; Radden B G; Ramshaw E H

CS Howard Florey Institute of Experimental Physiology and Medicine, University of Melbourne, Parkville, Australia..

SO ACTA PHYSIOLOGICA SCANDINAVICA. SUPPLEMENTUM, (1989) 583 53-8.  
Journal code: 1UF. ISSN: 0302-2994.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199002

AB Cows depleted of phosphorus by loss of saliva from a parotid fistula and low dietary phosphate developed an avid appetite for bones. The behaviour is innate and predominantly cued by olfactory stimuli. Meat, blood or fat were not attractive and bones became more attractive after aging for 1.5-2.0 years. The appetite was also shown for guano-derived rock phosphate and bird excreta. There was no interest in inorganic calcium and phosphate salts or ashed bone. The attractant is therefore an organic constituent of aging bone and was found to be at highest concentration in the marrow fraction. Water, ether and vacuum distillation extracts of old bone or marrow, added to unattractive materials e.g., ashed bone, rendered them attractive. The residues of such extraction were of diminished interest. The attractiveness of the fractionated extracts was highest in the neutral fraction. The bone appetite was abolished by increasing the phosphate concentration in plasma but not in cerebrospinal fluid. The phosphate concentration in the blood appears, therefore, to regulate the bone appetite. The sensors could be in brain regions without a blood-brain barrier. Chronic severe phosphorus deficiency was associated with bone resorption, reduced osteoblastic and hemopoietic activities, and abnormal blood progesterone cycles.

CT Check Tags: Animal; Female; Support, Non-U.S. Gov't

\*Appetite: PH, physiology

Bone and Bones: AN, analysis

\*Bone and Bones: ME, metabolism

Brain: PH, physiology

Cattle

Feeding Behavior: PH, physiology

Phosphorus: BL, blood

Phosphorus: DF, deficiency

RN 7723-14-0 (Phosphorus)

L130 ANSWER 7 OF 12 MEDLINE

AN 87308717 MEDLINE

DN 87308717

TI Pseudoepidemic of aspergillosis after development of pulmonary infiltrates in a group of bone marrow transplant patients.

AU Weems J J Jr; Andremon A; Davis B J; Tancrede C H; Guiguet M; Padhye A A; Squinazi F; Martone W J

SO JOURNAL OF CLINICAL MICROBIOLOGY, (1987 Aug) 25 (8) 1459-62.

Journal code: HSH. ISSN: 0095-1137.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198712

AB During February and March 1985, seven patients in the pediatric bone marrow transplant unit (PBMTU) of a 350-bed cancer hospital developed pulmonary infiltrates. Five of the patients had *Aspergillus* spp. isolated from the respiratory tract, and two of these patients had histologic evidence of aspergillosis. Between 26 February and 22 April, *Aspergillus* spp. were isolated in a total of 70 cultures from 39 hospitalized patients. Of the 70 cultures, 14 (group 1) were from respiratory specimens of PBMTU patients with pulmonary infiltrates and were submitted to the laboratory intermittently over the 56-day period. However, of the other 56 *Aspergillus*-positive cultures (group 2), 41 (73%) were submitted on six days during this period (P less than 0.001, chi-square goodness of fit), including 8 blood cultures submitted on one day. When *Aspergillus* sp. was recovered from group 1 cultures early during this period, the isolates were stored in the culture-processing room. *Aspergillus* isolates were not handled in a biological safety cabinet, and blood cultures were done by using a system which requires opening of an evacuated bottle to room air. The presence of stored *Aspergillus* isolates was associated with a markedly elevated concentration of airborne fungi in the culture-processing room. After removal of the stored *Aspergillus* isolates from the culture-processing room, the concentration of airborne fungi returned to background level and there were no further *Aspergillus*-positive cultures. These findings suggested that group 2 cultures had been contaminated by stored *Aspergillus* isolates. No evidence for a common source of infection was found in the PBMTU patients with pulmonary infiltrates.

CT Check Tags: Female; Human; Male

Air Microbiology

Aspergillosis: DI, diagnosis

\*Aspergillosis: EP, epidemiology

Aspergillosis: ET, etiology

Aspergillus: IP, isolation & purification

\*Bone Marrow: TR, transplantation

\*Bone Marrow Transplantation

Child

Cross Infection: DI, diagnosis

- \*Cross Infection: EP, epidemiology
- Cross Infection: ET, etiology
- Diagnostic Errors
- \*Disease Outbreaks
- Hospital Units
- Lung Diseases, Fungal: DI, diagnosis
- \*Lung Diseases, Fungal: EP, epidemiology
- Lung Diseases, Fungal: ET, etiology
- Respiratory System: MI, microbiology

L130 ANSWER 8 OF 12 MEDLINE

AN 87284218 MEDLINE

DN 87284218

TI Immediate medical consequences of nuclear accidents. Lessons from Chernobyl.

AU Gale R P

NC CA23175 (NCI)

SO JAMA, (1987 Aug 7) 258 (5) 625-8.

Journal code: KFR. ISSN: 0098-7484.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals

EM 198711

AB The immediate medical response to the nuclear accident at the Chernobyl nuclear power station involved containment of the radioactivity and **evacuation** of the nearby population. The next step consisted of assessment of the radiation dose received by individuals, based on biological dosimetry, and treatment of those exposed. Medical care involved treatment of skin burns; measures to support bone marrow failure, gastrointestinal tract injury, and other organ damage (ie, infection prophylaxis and transfusions) for those with lower radiation dose exposure; and bone marrow transplantation for those exposed to a high dose of radiation. At Chernobyl, two victims died immediately and 29 died of radiation or thermal injuries in the next three months. The remaining victims of the accident are currently well. A nuclear accident anywhere is a nuclear accident everywhere. Prevention and cooperation in response to these accidents are essential goals.

CT Check Tags: Human; Support, U.S. Gov't, P.H.S.

\*Accidents

Blood Transfusion

**Bone Marrow: TR, transplantation**

**Bone Marrow Transplantation**

\*Emergency Medical Services

Infection: PC, prevention & control

Infection Control

\*Nuclear Reactors

Radiation Dosage

Radiation Injuries: TH, therapy

Radiation Monitoring



Ukraine

L130 ANSWER 9 OF 12 MEDLINE

AN 83186849 MEDLINE

DN 83186849

TI Histopathology of the lung after bone marrow transplantation.

AU Sloane J P; Depledge M H; Powles R L; Morgenstern G R; Trickey B S; Dady P J

SO JOURNAL OF CLINICAL PATHOLOGY, (1983 May) 36 (5) 546-54.

Journal code: HT3. ISSN: 0021-9746.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals  
EM 198308

AB The histopathological changes in the lungs of 32 patients who died after bone marrow transplantation for leukaemia have been studied and compared with those found in 21 patients treated by conventional chemotherapy. The transplanted patients exhibited a higher incidence of interstitial pneumonitis, vascular lesions and viral infections, particularly cytomegalovirus (CMV), although bacterial and fungal diseases were commoner in the non-grafted subjects. The pathogenesis of interstitial pneumonitis is discussed with specific reference to the possible roles of irradiation, chemotherapy, viruses and the immunosuppressive drug cyclosporin A. Ten patients died of a syndrome characterised clinically by fever, skin rash, fluid retention, uraemia, low serum albumin concentrations, low central venous pressure and acute pulmonary oedema. These patients exhibited intra-alveolar haemorrhagic fibrinous exudation with or without interstitial changes. The aetiology of this syndrome is not known but it occurs more frequently in recipients of mismatched grafts and evidence is presented suggesting that viruses may play a significant causative role. No lesion was identified that could be directly attributed to Graft-versus-Host disease.

CT Check Tags: Female; Human; Male; Support, Non-U.S. Gov't

Adolescence

Adult

**\*Bone Marrow: TR, transplantation**

**\*Bone Marrow Transplantation**

Child

Graft Rejection

**\*Leukemia: TH, therapy**

Lung: BS, blood supply

**\*Lung: PA, pathology**

Lung Diseases: ET, etiology

**\*Lung Diseases: PA, pathology**

Middle Age

Pulmonary Edema: ET, etiology

Pulmonary Edema: PA, pathology

Pulmonary Fibrosis: ET, etiology

Pulmonary Fibrosis: PA, pathology

Vascular Diseases: ET, etiology  
Vascular Diseases: PA, pathology

L130 ANSWER 10 OF 12 MEDLINE

AN 78155830 MEDLINE

DN 78155830

TI A solution to the graft-versus-host problem in bone marrow  
transplantation to humans.

AU Kast R E

SO MEDICAL HYPOTHESES, (1978 Mar-Apr) 4 (2) 173-7.

Journal code: MOM. ISSN: 0306-9877.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 197808

AB Many clinical situations arise where it would be desirable to  
transplant bone marrow to a marrow function deficient  
patient. However, bone marrow is immunologically competent by virtue  
of its content of lymphocyte precursors. Marrow  
transplantation in these patients is followed by the graft's  
immunological rejection of the patient - a fatal disease. A system  
for specific abrogation of this graft-versus-host disease after  
xenogeneic bone marrow transplantation to humans is  
presented. In this system, prospective patient cells are removed by  
skin biopsy for example, and injected into a fetal chimpanzee. The  
fetal chimpanzee becomes tolerant to this patient's antigens and  
will not attack or reject them when its bone  
marrow is removed after birth and injected into  
the specific patient from whom the tolerogenic cells were obtained.  
A simple and straightforward experimental test of this system's  
clinical applicability is also presented.

CT Check Tags: Animal; Human

\*Bone Marrow: TR, transplantation

\*Bone Marrow Transplantation

Fetus: IM, immunology

\*Graft vs Host Reaction

Graft Rejection

Pan troglodytes

Transplantation, Heterologous: MT, methods

L130 ANSWER 11 OF 12 MEDLINE

AN 77022502 MEDLINE

DN 77022502

TI Marrow regeneration after mechanical depletion.

AU Brecher G; Tjio J H; Smith W W; Haley J E

SO BLOOD, (1976 Nov) 48 (5) 679-86.

Journal code: A8G. ISSN: 0006-4971.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 197702

AB The origin of marrow regeneration after mechanical depletion was reinvestigated in mouse chimeras. The results were compatible with the local origin of stem cells from remnants of incompletely removed marrow, but not with their origin from a common precursor of both bone and hemopoietic cell lines. In transplanted femurs depleted by a modified technique of in vivo **evacuation** of marrow, hemopoietic regeneration failed to occur. The presence of hemopoietic stem cells in the Haversian canals was thus excluded. The demonstration of ample hemopoiesis with minimal bone formation in nondepleted controls in which bone marrow initially became necrotic provided new evidence that osteogenesis was not a prerequisite of hemopoietic regeneration.

CT Check Tags: Animal; Female

Bone Marrow: CY, cytology

\*Bone Marrow: PH, physiology

Bone Marrow: TR, transplantation

Bone Marrow Transplantation

\*Bone Regeneration

Haversian System: PH, physiology

Hindlimb: PH, physiology

Mice

Mice, Inbred AKR

Radiation Chimera

Transplantation, Isogeneic

L130 ANSWER 12 OF 12 MEDLINE

AN 75186988 MEDLINE

DN 75186988

TI Bone marrow regeneration after local injury: a review.

AU Patt H M; Maloney M A

SO EXPERIMENTAL HEMATOLOGY, (1975 Apr) 3 (2) 135-48. Ref: 61

Journal code: EPR. ISSN: 0301-472X.

CY Denmark

DT Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LA English

FS Priority Journals

EM 197511

AB This paper is focused on a mechanically depleted medullary cavity as an experimental model for analysis of marrow regenerative programs. The reconstitution of marrow in an **evacuated** cavity is basically a local phenomenon in respect to the stimulus for regeneration and the origin of the responsible cells. The nature of the triggering stimulus is unknown, but it is probably related to disruption of the continuity of the marrow stroma and endosteum. The initiating cells appear to be independent lines of mesenchymal and hematopoietic stem cells bound to bone, most likely within the endosteum and haversian system. The mesenchymal cells form the characteristic marrow stroma. Hemic cell regeneration can occur

without immigrant hematopoietic stem cells, although such cells are known to contribute to later stages of repopulation. The formation and resorption of trabecular bone appears to be intimately related to the development of a sinusoidal matrix, perhaps by serving as a callus or supporting lattice and perhaps by providing a mechanism for distribution of stromal progenitors. Hematopoiesis is initiated in sites of active bone resorptive. The interplay of events consequent to marrow removal is strikingly similar to that seen with heterotopic marrow implants. Because stromal stem cells, unlike hematopoietic stem cells, do not migrate from distant sites, marrow stroma is the limiting factor in recovery from localized injury. Stromal stem cells are fairly radiosensitive but are not as sensitive as hematopoietic stem cells. The apparent radioresistance of stromal elements in an intact marrow seems to be due to their very low turnover rate. Latent radiation damage can be readily unmasked by conditions that promote their proliferation.

This no doubt accounts for the radiosensitivity of stroma in an evacuated femur or heterotopic implant in contrast to its continued functional integrity with similar irradiation of in situ marrow. Even in an intact marrow, however, exposures in the 1000 rad range can lead to slowly evolving hypocellularity associated with diminished blood flow. With higher doses, aplasia of the irradiated site becomes progressively more generalized. It remains to be seen whether this limiting condition is due to the loss of specific regulatory functions or stromal components or merely reflects sinusoidal damage.

CT Check Tags: Human; Support, U.S. Gov't, Non-P.H.S.

Bone Marrow: CY, cytology

\*Bone Marrow: PH, physiology

Bone Marrow: RE, radiation effects

Hematopoietic Stem Cells: RE, radiation effects

Radiation Effects

\*Radiation Injuries

\*Regeneration

Regeneration: RE, radiation effects

=> d 1131 1-8 all

L131 ANSWER 1 OF 8 MEDLINE

AN 1998034853 MEDLINE

DN 98034853

TI C1 esterase inhibitor concentrate for capillary leakage syndrome following bone marrow transplantation.

AU Nurnberger W; Heying R; Burdach S; Gobel U

CS Department of Pediatric Hematology and Oncology, Heinrich Heine University Medical Center, Dusseldorf, Germany.

SO ANNALS OF HEMATOLOGY, (1997 Sep) 75 (3) 95-101.

Journal code: A2P. ISSN: 0939-5555.

CY GERMANY: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; Cancer Journals

EM 199802

EW 19980204

AB The prognosis of patients with severe capillary leakage syndrome (CLS) after **bone marrow transplantation** (BMT) is dismal despite aggressive use of intensive care therapy. Because the activated classical pathway of complement and relatively low levels of C1 esterase inhibitor (C1 INH) activity are known features in these patients, we evaluated the efficacy of a therapy using purified, human C1 INH concentrate. Severe CLS was defined as increase in body weight by more than 3% within 24 h combined with generalized edema, impaired hemodynamic system (tachycardia and/or **decreased blood pressure**), and non-responsiveness to furosemide. Of 142 patients, 22 developed severe CLS. The first seven patients whom we diagnosed with this complication were assessed as control patients. Fifteen patients with severe CLS were treated with C1 INH concentrate using a cumulative dose of 180 units/kg body wt. (initial dose: 60 units/kg, followed by two doses at 30 units/kg and four doses at 15 units/kg, every 12 h). The survival rate of patients with CLS was 57% at 1 year after BMT in the C1 INH treatment group, compared with 14% in the control group ( $p = 0.008$ ). Eight of 15 treated patients are alive at a median of 9 months (range: 4-55) after BMT. The plasma levels of the complement activation parameters C4d and C5a were  $3 \pm 1.1$  mg/dl (mean  $\pm$  S.D.) and  $0.3 \pm 0.1$  microgram/l, respectively, prior to BMT, increasing to  $8.2 \pm 2.1$  mg/dl and  $1.3 \pm 0.4$  micrograms/l, respectively, at diagnosis of CLS. After infusion of C1 INH concentrate the plasma levels of C5a and C4d normalized. The activity of C1 INH rose to  $139 \pm 10\%$  of normal human plasma NHP pool (mean  $\pm$  S.D.) after infusion. The CH50 values were not significantly altered. The fluid status normalized within 11 days in 14 of 15 treated patients. The results of this study suggest that therapy with C1 INH concentrate improves the prognosis of patients with CLS after BMT. This has to be confirmed in a randomized, controlled trial.

CT Check Tags: Female; Human; Male

Adolescence

Adult

Body Weight: DE, drug effects

**\*Bone Marrow Transplantation: AE, adverse effects**

Capillary Leak Syndrome: DI, diagnosis

**\*Capillary Leak Syndrome: DT, drug therapy**

**\*Capillary Leak Syndrome: ET, etiology**

Child

Child, Preschool

Complement: ME, metabolism

Complement Activation: DE, drug effects

**\*Complement 1 Inactivators: TU, therapeutic use**

Hepatic Veno-Occlusive Disease: CO, complications

Hepatic Veno-Occlusive Disease: DT, drug therapy

Infant

Prekallikrein: DE, drug effects

Prekallikrein: ME, metabolism

RN 9007-36-7 (Complement); 9055-02-1 (Prekallikrein)

CN 0 (Complement 1 Inactivators)

L131 ANSWER 2 OF 8 MEDLINE

AN 96097215 MEDLINE

DN 96097215

TI Intravesicular carboprost for the treatment of hemorrhagic cystitis after marrow transplantation.

AU Ippoliti C; Przepiorka D; Mehra R; Neumann J; Wood J; Claxton D; Gajewski J; Khouri I; van Besien K; Andersson B; et al

CS Department of Hematology, University of Texas M.D. Anderson Cancer Center, Houston.

SO UROLOGY, (1995 Dec) 46 (6) 811-5.

Journal code: WSY. ISSN: 0090-4295.

CY United States

DT (CLINICAL TRIAL)

(CLINICAL TRIAL, PHASE I)

(CLINICAL TRIAL, PHASE II)

Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; Cancer Journals

EM 199603

AB OBJECTIVES. To determine the minimal active dose and extent of activity of intravesicular carboprost for the treatment of hemorrhagic cystitis after marrow transplantation. METHODS. Twenty-four adults with grade 3 or 4 hemorrhagic cystitis were treated. All but 2 had failed other local therapy. Treatment was initiated at a median of 32 days post-transplant. Eleven patients received carboprost intravesicularly at 0.2 mg/dL for 60 minutes every 6 hours, and the dose was escalated every 24 hours until a dose of 1.0 mg/dL was reached unless a response was achieved. Thirteen additional patients were treated at an initial dose of 0.8 mg/dL, with escalation to 1.0 mg/dL after four doses in the absence of a response. RESULTS. Overall, 15 of the 24 patients responded. In the dose-escalation setting, 0.8 mg/dL was the minimal active dose. The total response rate was 62% with doses at or above 0.8 mg/dL and 18% at lower doses. All but one response occurred with 7 or fewer days of therapy, and 9 patients relapsed later. Four additional patients were salvaged following cystoscopy with clot evacuation with or without alum or formalin instillation. In all but 1 patient, bladder spasms developed during treatment with carboprost, but were not sufficiently severe to discontinue therapy. CONCLUSIONS. Intravesicular carboprost at 1.0 mg/dL every 6 hours for no more than 7 days should be considered for a randomized study for treatment of refractory hemorrhagic cystitis. Cystoscopic examination and evacuation of clots prior to therapy may be required to achieve the full benefit of this treatment.

CT Check Tags: Female; Human; Male

Administration, Intravesical

Adult

**\*Bone Marrow Transplantation: AE, adverse effects**

**\*Carboprost: AD, administration & dosage**

**\*Cystitis: DT, drug therapy**

Cystitis: ET, etiology

Drug Administration Schedule

**\*Hemorrhage: DT, drug therapy**

Hemorrhage: ET, etiology

Middle Age

RN 35700-23-3 (Carboprost)

L131 ANSWER 3 OF 8 MEDLINE

AN 94105382 MEDLINE

DN 94105382

TI Prophylaxis of **bone marrow transplant**

nephropathy with captopril, an inhibitor of angiotensin-converting enzyme.

AU Moulder J E; Cohen E P; Fish B L; Hill P

CS Department of Radiation Oncology, Medical College of Wisconsin, Milwaukee 53226..

NC CA24652 (NCI)

SO RADIATION RESEARCH, (1993 Dec) 136 (3) 404-7.

Journal code: QMP. ISSN: 0033-7587.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; Cancer Journals

EM 199404

AB Chronic renal failure occurs in about 20% of long-term survivors treated with **bone marrow transplant**

(BMT) regimens that include total-body irradiation (TBI); this syndrome is called BMT nephropathy. In a previous study in a syngeneic rat BMT model it was shown that captopril (an inhibitor of angiotensin-converting enzyme) could be used to treat experimental BMT nephropathy. Current studies were designed to determine whether captopril could also be used to prevent BMT nephropathy. Rats received 14 to 18.5 Gy TBI in six fractions over 3 days followed by syngeneic BMT. Seven days before TBI half the rats were started on captopril (500 mg/liter in the drinking water). Blood urea nitrogen, ratios of urine protein to creatinine, serum creatinine, and blood pressure were used to assess renal function. In animals receiving TBI alone, BMT nephropathy developed 3 to 6 months after transplant. At 6 months after TBI, captopril-treated animals had **lower systolic blood pressure** and better-preserved renal function than animals receiving TBI alone, with dose-modifying factors of about 1.3. The captopril treatment had no effect on bone marrow ablation by TBI. Captopril appears to be safe and effective in the prophylaxis of BMT nephropathy.

CT Check Tags: Animal; Male; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Blood Urea Nitrogen

**\*Bone Marrow Transplantation: AE, adverse effects**  
**\*Captopril: TU, therapeutic use**  
**\*Kidney Failure, Chronic: PC, prevention & control**  
**Rats**

Whole-Body Irradiation  
 RN 62571-86-2 (Captopril)

L131 ANSWER 4 OF 8 MEDLINE

AN 93358279 MEDLINE

DN 93358279

TI Remission of Philadelphia positive chronic myelogenous leukemia associated with t(3;21) after **bone marrow transplantation.**

AU Uriarte M R; Mori M A; de Bellis R; Cardoso H

CS Division Citogenetica, Instituto de Investigaciones Biologicas Clemente Estable, Montevideo, Uruguay..

SO CANCER GENETICS AND CYTOGENETICS, (1993 Jul 15) 68 (2) 122-5.  
 Journal code: CMT. ISSN: 0165-4608.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; Cancer Journals

EM 199311

AB We here report a male patient with an additional t(3;21)(q26;q22) in Philadelphia positive chronic myelogenous leukemia (Ph + CML). In spite of the presence of this progression of disease marker and probably related to alpha-interferon therapy, this case entered into remission as a second chronic phase. At that time, he underwent **allogeneic bone marrow transplantation**

. One year after BMT he showed a disappearance of leukemic clones at the cytogenetic and molecular levels. At present the patient has 21 months of clinical and hematologic remission. It is of interest to note that the association of alpha-interferon-hydroxyurea and **bone marrow transplantation** might

produce a **negative selection pressure** against the leukemic clone in this patient.

CT Check Tags: Case Report; Human; Male; Support, Non-U.S. Gov't  
 Adult

Blotting, Southern

**\*Bone Marrow Transplantation**

Chemotherapy, Adjuvant

**\*Chromosomes, Human, Pair 21**

Chromosomes, Human, Pair 22

**\*Chromosomes, Human, Pair 3**

Chromosomes, Human, Pair 9

DNA, Neoplasm: AN, analysis

Hydroxyurea: TU, therapeutic use

Interferon-alpha: TU, therapeutic use

Karyotyping

Leukemia, Myeloid, Philadelphia-Positive: DT, drug therapy

**\*Leukemia, Myeloid, Philadelphia-Positive: GE, genetics**



Leukemia, Myeloid, Philadelphia-Positive: SU, surgery  
Remission Induction  
\*Translocation (Genetics)

RN 127-07-1 (Hydroxyurea)  
CN 0 (DNA, Neoplasm); 0 (Interferon-alpha)

L131 ANSWER 5 OF 8 MEDLINE

AN 92395498 MEDLINE

DN 92395498

TI Effective early treatment of hepatic venoocclusive disease with a central splenorenal shunt in an infant.

AU Jacobson B K; Kalayoglu M

CS Department of Surgery, University of Wisconsin School of Medicine, Madison..

SO JOURNAL OF PEDIATRIC SURGERY, (1992 Apr) 27 (4) 531-3.

Journal code: JMJ. ISSN: 0022-3468.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199212

AB Venoocclusive disease of the liver (VOD) is a well-described complication following chemotherapy. It is manifested by jaundice and signs of portal hypertension and carries a mortality rate approaching 50%. There is no known treatment for the disease itself, although several recent reports suggest portacaval diversion may be effective in treating its sequelae. A 6.75-kg 8-month-old boy with VOD following bone marrow ablation and

**bone marrow transplantation (BMT) for**

juvenile chronic myelogenous leukemia (JCML) is presented. Over a 6-week period following bone marrow ablation he developed ascites refractory to diuretics, jaundice, and hematemesis with normal hepatocellular function. Splenectomy with a central splenorenal shunt was performed, which resulted in a significant

**reduction in portal pressures and complete**

resolution of his ascites and hematemesis without resultant encephalopathy. We propose that central end-to-side splenorenal shunting is an acceptable treatment for portal hypertension due to VOD and can be successfully performed in infants.

CT Check Tags: Case Report; Human; Male

**\*Bone Marrow Transplantation: AE, adverse effects**

Hepatic Veno-Occlusive Disease: CO, complications

Hepatic Veno-Occlusive Disease: ET, etiology

**\*Hepatic Veno-Occlusive Disease: SU, surgery**

Hypertension, Portal: ET, etiology

**\*Hypertension, Portal: SU, surgery**

Infant

Portal System: RA, radiography

**\*Splenorenal Shunt, Surgical**

L131 ANSWER 6 OF 8 MEDLINE

AN 92149617 MEDLINE  
 DN 92149617  
 TI Transmission of human immunodeficiency virus type 1 from a seronegative organ and tissue donor [see comments].  
 CM Comment in: N Engl J Med 1992 Aug 20;327(8):564-5  
 AU Simonds R J; Holmberg S D; Hurwitz R L; Coleman T R; Bottenfield S; Conley L J; Kohlenberg S H; Castro K G; Dahan B A; Schable C A; et al  
 CS Division of HIV/AIDS, Centers for Disease Control, Atlanta, GA 30333.  
 SO NEW ENGLAND JOURNAL OF MEDICINE, (1992 Mar 12) 326 (11) 726-32. Journal code: NOW. ISSN: 0028-4793.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals  
 EM 199205  
 AB BACKGROUND. Since 1985, donors of organs or tissues for transplantation in the United States have been screened for human immunodeficiency virus type 1 (HIV-1), and more than 60,000 organs and 1 million tissues have been transplanted. We describe a case of transmission of HIV-1 by transplantation of organs and tissues procured between the time the donor became infected and the appearance of antibodies. The donor was a 22-year-old man who died 32 hours after a gunshot wound; he had no known risk factors for HIV-1 infection and was seronegative. METHODS. We reviewed the processing and distribution of all the transplanted organs and tissues, reviewed the medical histories of the donor and HIV-1-infected recipients, tested stored donor lymphocytes for HIV-1 by viral culture and the polymerase chain reaction, and tested stored serum samples from four organ recipients for HIV-1 antigen and antibody. RESULTS. HIV-1 was detected in cultured lymphocytes from the donor. Of 58 tissues and organs obtained from the donor, 52 could be accounted for by the hospitals that received them. Of the 48 identified recipients, 41 were tested for HIV-1 antibody. All four recipients of organs and all three recipients of unprocessed fresh-frozen bone were infected with HIV-1. However, 34 recipients of other tissues--2 receiving corneas, 3 receiving lyophilized soft tissue, 25 receiving ethanol-treated bone, 3 receiving dura mater treated with gamma radiation, and 1 receiving marrow-evacuated, fresh-frozen bone--tested negative for HIV-1 antibody. Despite immunosuppressive chemotherapy, HIV-1 antibody appeared between 26 and 54 days after transplantation in the three organ recipients who survived more than four weeks. CONCLUSIONS. Although rare, transmission of HIV-1 by seronegative organ and tissue donors can occur. Improvements in the methods used to screen donors for HIV-1, advances in techniques of virus inactivation, prompt reporting of HIV infection in recipients, and accurate accounting of distributed allografts would help to reduce further this already exceedingly low risk.

CT Check Tags: Case Report; Human; Male  
 \*Acquired Immunodeficiency Syndrome: TM, transmission  
 Adult  
 Bone Transplantation: AE, adverse effects  
 Cells, Cultured  
 Corneal Transplantation: AE, adverse effects  
 Heart Transplantation: AE, adverse effects  
 HIV Antibodies: AN, analysis  
 \*HIV Seropositivity  
 \*HIV-1  
 HIV-1: IP, isolation & purification  
 Kidney Transplantation: AE, adverse effects  
 Liver Transplantation: AE, adverse effects  
 Lymphocytes: MI, microbiology  
 \*Organ Transplantation: AE, adverse effects  
 \*Tissue Banks: ST, standards  
 \*Tissue Donors  
 United States  
 CN 0 (HIV Antibodies)

L131 ANSWER 7 OF 8 MEDLINE  
 AN 91120509 MEDLINE  
 DN 91120509  
 TI Orbital aspergillosis. Conservative debridement and local  
 amphotericin irrigation.  
 AU Harris G J; Will B R  
 CS Department of Ophthalmology, Medical College of Wisconsin,  
 Milwaukee.  
 NC EY-01931 (NEI)  
 SO OPHTHALMIC PLASTIC AND RECONSTRUCTIVE SURGERY, (1989) 5 (3) 207-11.  
 Journal code: AY2. ISSN: 0740-9303.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199105  
 AB A patient maintained on long-term immunosuppressive agents after  
 bone marrow transplantation developed an  
 Aspergillus abscess in the right orbit. The abscess was resected  
 without visual compromise and the orbit was irrigated regularly with  
 amphotericin B via an indwelling catheter. Follow-up computed  
 tomography, surgical exploration, and histological analysis  
 demonstrated suppression of fungal growth in the orbit. Persistent  
 fungus was recovered from nonirrigated sinuses despite their  
 previous surgical evacuation and continued systemic  
 amphotericin B administration. Treatment of orbital aspergillosis  
 should include surgical reduction of the local fungal inoculum,  
 supplementation of intravenous antifungal agents with local delivery  
 to minimize systemic toxicity, and attempts to reverse the  
 immunosuppression. If the last is not possible, extensive  
 extirpation of normal surrounding tissues will not prevent

CT repopulation by the ubiquitous fungus.  
Check Tags: Case Report; Female; Human; Support, Non-U.S. Gov't;  
Support, U.S. Gov't, P.H.S.

Adult

Amphotericin B: AD, administration & dosage

\*Amphotericin B: TU, therapeutic use

\*Aspergillosis: DT, drug therapy

\*Aspergillosis: SU, surgery

**Bone Marrow Transplantation**

Catheters, Indwelling

Debridement

\*Ethmoid Sinusitis: DT, drug therapy

\*Ethmoid Sinusitis: SU, surgery

Immunosuppression

Injections, Intravenous

Leukemia, Myelocytic, Acute: SU, surgery

\*Orbital Diseases: DT, drug therapy

\*Orbital Diseases: SU, surgery

RN 1397-89-3 (Amphotericin B)

L131 ANSWER 8 OF 8 MEDLINE

AN 90381378 MEDLINE

DN 90381378

TI [4 years after Chernobyl: medical repercussions].  
Quatre ans apr`es Tchernobyl: les retombees medicales.

AU Hubert D

SO BULLETIN DU CANCER, (1990) 77 (5) 419-28. Ref: 31

Journal code: BDZ. ISSN: 0007-4551.

CY France

DT Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, MULTICASE)

LA French

FS Priority Journals; Cancer Journals

EM 199012

AB The nuclear accident at Chernobyl accounted for an acute radiation syndrome in 237 persons on the site. Triage was the initial problem and was carried out according to clinical and biological criteria; evaluating the doses received was based on these criteria. Thirty one persons died and only 1 survived a dose higher than 6 Gy. Skin radiation burns which were due to inadequate decontamination, greatly worsened prognosis. The results of 13 bone

marrow transplantations were disappointing, with only 2 survivors. Some time after the accident, these severely irradiated patients are mainly suffering from psychosomatic disorders, in the USSR, some areas have been significantly contaminated and several measures were taken to mitigate the impact on population: evacuating 135,000 persons, distributing prophylactic iodine, establishing standards and controls on foodstuff. Radiation phobia syndrome which developed in many persons, is the only sanitary effect noticed up to now. Finally, in

Europe, there was only an increase in induced abortions and this was totally unwarranted. If we consider the risk of radiation induced cancer, an effect might not be demonstrated.

CT Check Tags: Female; Human; Male  
 Abnormalities, Radiation-Induced: EP, epidemiology  
 Abortion, Habitual: EP, epidemiology  
 Blood Cell Count  
 \*Bone Marrow Transplantation  
 \*Decontamination: MT, methods  
 Diarrhea: ET, etiology  
 English Abstract  
 Europe  
 \*Nuclear Reactors  
 Pregnancy  
 Prognosis  
 Psychophysiologic Disorders: ET, etiology  
 Pulmonary Fibrosis: ET, etiology  
 Radiation Dosage  
 \*Radiation Injuries  
 Radiation Injuries: CO, complications  
 Radiation Injuries: EP, epidemiology  
 Radiation Injuries: TH, therapy  
 Skin: RE, radiation effects  
 Triage  
 Ukraine

=> d 1132 1-5 ti

L132 ANSWER 1 OF 5 MEDLINE

TI [Neurologic complications following total endoprosthesis implantation of the hip under peridural catheter anesthesia].  
 Neurologische Komplikation nach Totalendoprothesen-implantation der Hufte in Katheterperiduralanasthesie.

L132 ANSWER 2 OF 5 MEDLINE

TI Evaluation of airborne particulates and fungi during hospital renovation.

L132 ANSWER 3 OF 5 MEDLINE

TI Treatment of cyclophosphamide-induced hemorrhagic cystitis with intravesical carboprost tromethamine.

L132 ANSWER 4 OF 5 MEDLINE

TI Hypertension after renal transplantation. A comparison of cyclosporine and conventional immunosuppression.

L132 ANSWER 5 OF 5 MEDLINE

TI [Wound infection and its treatment in accident surgery].  
 Wundinfektion und ihre Behandlung in der Unfallchirurgie.

=> d 1133 1-27 ti

L133 ANSWER 1 OF 27 MEDLINE

TI Pressure regulates osteoclast formation and MCSF expression in marrow culture.

L133 ANSWER 2 OF 27 MEDLINE

TI The histologic evaluation of the implant interface with heterograft and allograft materials--an eight-month autopsy report, Part II.

L133 ANSWER 3 OF 27 MEDLINE

TI [Changes in the characteristics of human granulo- and monocytopoiesis and the activity of stromal precursor cells in acute hypobaric hypoxia].  
Izmenenie kharakteristik granulo- i monotsitopoeza i aktivnosti stromal'nykh kletok-predshestvennikov u cheloveka pri ostroi gipobaricheskoi gipoksii.

L133 ANSWER 4 OF 27 MEDLINE

TI Ischaemia of bone.

L133 ANSWER 5 OF 27 MEDLINE

TI Serum ferritin and dysbaric osteonecrosis.

L133 ANSWER 6 OF 27 MEDLINE

TI Effect of the thymus on erythropoietin production in response to hypobaric hypoxia in mice.

L133 ANSWER 7 OF 27 MEDLINE

TI Additional diagnostic techniques. pp. 183-9.

L133 ANSWER 8 OF 27 MEDLINE

TI Modification of the proliferative capacity of transplanted bone marrow colony forming units by changes in the host environment.

L133 ANSWER 9 OF 27 MEDLINE

TI Unsuccessful attempts to produce avascular necrosis of bone by compression-decompression stress and alcohol ingestion in guinea pigs.

L133 ANSWER 10 OF 27 MEDLINE

TI The effects of hypoxia on the caudal vertebrae of growing mice and rats.

L133 ANSWER 11 OF 27 MEDLINE

TI [The action of exogenous erythropoietin on ribonucleic acid synthesis in rabbit bone marrow].  
Deistvie ekzogenogo eritropoetina na sintez ribonukleinovykh kislot v kostnom mozgu krolikov.

L133 ANSWER 12 OF 27 MEDLINE

TI [Experimental studies on osteoarticular manifestations of Caisson

disease].

Experimentelle Untersuchungen der osteoartikularen Manifestation der Caisson-Krankheit.

L133 ANSWER 13 OF 27 MEDLINE

TI Changes in the natural radioresistance of the mouse after hypoxia of several day's duration: the post-hypoxic behaviour of stem cells.

L133 ANSWER 14 OF 27 MEDLINE

TI The response of W-W v and Sl-Sl d anaemic mice to haemopoietic stimuli.

L133 ANSWER 15 OF 27 MEDLINE

TI Effects of radiation and hypoxia on the metabolic fate of erythropoietin.

L133 ANSWER 16 OF 27 MEDLINE

TI The effects of antilymphocyte serum on posthypoxic polycythemic rat bone marrow.

L133 ANSWER 17 OF 27 MEDLINE

TI Hematologic changes associated with viral infection and hypobaric hypoxia.

L133 ANSWER 18 OF 27 MEDLINE

TI Regulation of erythropoiesis (XXIV). Studies on the post-hypoxic "rebound" phase.

L133 ANSWER 19 OF 27 MEDLINE

TI A quantitative study of blood and bone marrow eosinophils in severe hypoxia.

L133 ANSWER 20 OF 27 MEDLINE

TI Erythropoietic activity of marrow and disappearance rate of erythropoietin in the rat.

L133 ANSWER 21 OF 27 MEDLINE

TI [The system of the xenogenetic colonization of the spleen of the mouse: preliminary studies].  
Le syst`eme de la colonisation xenogeneique de la rate de la Souris: etudes preliminaires.

L133 ANSWER 22 OF 27 MEDLINE

TI Hyperbaric chamber and decompression sickness: an experimental study.

L133 ANSWER 23 OF 27 MEDLINE

TI Eosinophil granulocytes and hypoxia.

L133 ANSWER 24 OF 27 MEDLINE

TI [Behavior of the figured elements of the blood and bone marrow in

barotrauma].

Comportamento degli elementi figurati del sangue e del midollo nel barotrauma.

L133 ANSWER 25 OF 27 MEDLINE

TI [Oxygen consumption of some parenchymas in experimental hyperbaropathy].

Il consumo d'ossigeno di alcuni parenchimi nell'iperbaropatia sperimentale.

L133 ANSWER 26 OF 27 MEDLINE

TI Relationship between oxygen tension in tissues and the protective action of para-aminopropiophenone and of propylene glycol.

L133 ANSWER 27 OF 27 MEDLINE

TI [Experimental studies on the effect on hematopoiesis of severe hypoxia caused by low pressure].

Experimentelle Untersuchungen uber den Einfluss schwerer, durch Unterdruck erzeugter Hypoxie auf die Blutbildung.

=> file wpids

FILE 'WPIDS' ENTERED AT 11:43:11 ON 27 MAR 1998

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FILE LAST UPDATED: 23 MAR 1998

<19980323/UP>

>>>UPDATE WEEKS:

MOST RECENT DERWENT WEEK 199812 <199812/DW>

DERWENT WEEK FOR CHEMICAL CODING: 199807

DERWENT WEEK FOR POLYMER INDEXING: 199809

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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>>> CHANGES TO DWPI COVERAGE - SEE NEWS <<<

=> d l138 1-27 ibib abs

L138 ANSWER 1 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 98-076784 [07] WPIDS

DOC. NO. CPI: C98-025629

TITLE: **Solution** for preservation of biological materials - comprises two neutral solutes, especially raffinose and tri methylamine oxide.

DERWENT CLASS: B04 D16 D22 E19 E37

INVENTOR(S): FERGUSON, A B; WIGGINS, P M

PATENT ASSIGNEE(S): (BIOS-N) BIOSTORE NEW ZEALAND LTD

COUNTRY COUNT: 70

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

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WO 9747192 A1 971218 (9807)\* EN 53



RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA  
PT SD SE SZ UG  
W: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE  
HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW  
MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9747192	A1	WO 96-NZ57	960614

PRIORITY APPLN. INFO: WO 96-NZ57  
AN 98-076784 [07] WPIDS  
AB WO 9747192 A UPAB: 980216

960614

*late n/g*

The following are claimed: (1) a **solution** for preservation of biological materials: (A) comprising: (a) a first neutral solute with a molecular weight of at least 335 and a solubility in water of at least 0.3 M, and (b) a second neutral solute with a molecular weight < 200 and with both hydrophilic and hydrophobic moieties; or (B) which is isotonic with the biological materials and is free of univalent oxyanions and iodide, and (2) preservation of biological materials by: (a) pretreating the biological material with a **solution** which includes sodium butyrate, and (b) contacting the biological material with a preservative **solution**.

The **solution** (A) is free of univalent oxyanions and iodide, and also comprises at least 1 ion from a protein-stabilising end of the Hofmeister series. The first solute is selected from disaccharides and trisaccharides, especially raffinose, trehalose, sucrose, lactose and their analogues. The second neutral solute is selected from trimethylamine oxide, betaine, taurine, sarcosine, glucose, mannose, fructose, ribose, galactose, sorbitol, mannitol, inositol and their analogues. The **solution** may also comprise sodium sulphate. It may also comprise calcium, which is present as calcium sulphate at a concentration of 1.5-2.0 mM. The **solution** is in a concentrated form, especially in the form of a solid. Components (a) and (b) are typically present at a ratio of 1.4-1.8:1.

USE - The **solutions** may be used for preservation of materials such as organs, tissues and cells from mammals, marine organisms and plants. They may be used e.g. in treatment of leukaemia. In this case, **bone marrow** is removed from a patient and contacted with the **solution** for at least 3 days, in order to purge the bone marrow of leukaemic cells. The purged bone marrow is then returned to the patient.

ADVANTAGE - The **solutions** are of low toxicity, resulting in fewer side effects when biological materials, such as **transplant** organs, are returned to a patient.

Dwg.0/20

L138 ANSWER 2 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 97-457534 [42] WPIDS  
 DOC. NO. CPI: C97-146100  
 TITLE: Modified complement pathway protein that forms C3  
 convertase resistant to down-regulation - used to  
 exhaust the complement pathway by superactivation,  
 especially for preventing graft rejection, etc..  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): FARRIES, T C; HARRISON, R A  
 PATENT ASSIGNEE(S): (IMUT-N) IMUTRAN LTD  
 COUNTRY COUNT: 76  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9732981	A1	970912	(9742)*	EN	101
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL					
OA PT SD SE SZ UG					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI					
GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD					
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT					
UA UG US UZ VN YU					
AU 9722257	A	970922	(9804)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9732981	A1	WO 97-GB603	970304
AU 9722257	A	AU 97-22257	970304

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9722257	A Based on	WO 9732981

PRIORITY APPLN. INFO: GB 96-24028 961119; GB 96-4865 960307; GB  
 96-11896 960607; GB 96-14293 960708

AN 97-457534 [42] WPIDS  
 AB WO 9732981 A UPAB: 971021

A modified native complement pathway protein (A) that forms a  
 down-regulation resistant C3 convertase is new. Also new are: (1)  
 fragments or variants of (A) with C3 convertase activity and also  
 resistance to the complement-inhibiting activity of factor H, factor  
 I, CR1, MCP and/or DAF; (2) a DNA sequence (I) encoding (A), its  
 fragments and variants; (3) DNA constructs, e.g. vectors, containing  
 (I); and (4) conjugates of (A) and a specific binding agent.

USE - (A), their variants, fragments and conjugates are used to  
 deplete levels of complement pathway proteins (by superactivation

until one or more components are exhausted), specifically to prevent rejection of foreign material (particularly a xenograft) but also to prevent complement-mediated diseases resulting from (surgical) injury or antibody-antigen interaction in autoimmune disease, also to localise and/or amplify endogenous complement protein conversion and deposition at a specific site (e.g. a virus, infected cell or tumour, to increase sensitivity to complement-mediated responses; a particular application is eliminating any cancer cells left after surgical removal of a tumour). Also contemplated is ex vivo treatment, especially by passing blood through a matrix containing (A) (this may remove additionally anaphylactic peptides and other inflammatory mediators) or killing of leukaemia cells or MHC-mismatched lymphocytes in extracted bone marrow.

ADVANTAGE - Since (A) is not inhibited by factor I, it can bind repeatedly to factor B (which is then inactivated), causing inactivation of the alternative pathway by consumption of factor B.  
Dwg.0/15

L138 ANSWER 3 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 97-126345 [12] WPIDS  
 DOC. NO. CPI: C97-040219  
 TITLE: Proteinaceous foods and their prodn. - by enzymatic hydrolysis of bones opt. with added tissues and blood.  
 DERWENT CLASS: D12 D13 D16  
 PATENT ASSIGNEE(S): (META-N) METALEX KENKYUSHO KK  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 09009880	A	970114	(9712)*		5

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 09009880	A	JP 95-160659	950627

PRIORITY APPLN. INFO: JP 95-160659 950627

AN 97-126345 [12] WPIDS  
 AB JP09009880 A UPAB: 970320

Proteinaceous foods are prepd. by enzymatic hydrolysis of bones, opt. with added tissues and blood, of animals and contg. 60-90 wt.% of oligopeptides in total amino acid components. Processes for the prodn. of proteinaceous foods by extn. of soluble protein in bones, opt. with added tissues and blood, of animals, addn. of a proteinase with a deodorant, followed by filtration and drying.

Bones, pref. an equal ratio mixt. of back and long bones,

together with tissues and blood of animals are mixed and extracted with pressurised steam to give soluble protein of bone marrow, collagen and tissues. The extracted protein is enzymatically hydrolysed with proteinases derived from pancreas and a deodorant (e.g. flavonol and tea leaves). The reaction mixt. is filtered, conc. under reduced pressure at 80 deg.C and dried in vacuo in 4 hrs. to give the foods.

ADVANTAGE - Foods composed of odourless essential amino acids with favourable intestinal absorption.

In an example, a mixt. of each 200 kg of back bones and long bones were crushed to pieces of about 10 mm sizes, washed and steam heated at 0.12 Mpa for 8 hrs.. Oily component in the resultant extract was sepd. and 4 kg of gelatin was mixed and stirred under heating for 1 hr.. The reaction mixt. was cooled to 47 deg.C, made pH 7.5-7.8 with Ca(OH)<sub>2</sub> and 8 kg of swine pancreas was added in 2 portions together with 3 kg of tea leaves and hydrolysed for 4 hrs. till the NH<sub>3</sub> content became 2% or over. The resultant reaction mixt. was made pH 5.4-5.8, filtered, evaporated in vacuo and dried on a stainless steel plate to give 35 kg of the hydrolysed protein contg. total amino acids and oligopeptides at a ratio of 1:0.71.

Dwg.0/1

L138 ANSWER 4 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 97-073905 [07] WPIDS  
 DOC. NO. NON-CPI: N97-061326  
 DOC. NO. CPI: C97-023884  
 TITLE: Test on cytomegalovirus antigen, permitting accurate and easy judgement - comprises using antibody which specifically recognises lower matrix protein pp65 of virus as prim. antibody.  
 DERWENT CLASS: B04 D16 S03  
 PATENT ASSIGNEE(S): (YUKA-N) YUKA MEDIAS KK  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 08320323	A	961203	(9707)*		6

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 08320323	A	JP 95-128072	950526

PRIORITY APPLN. INFO: JP 95-128072 950526  
 AN 97-073905 [07] WPIDS

AB JP08320323 A UPAB: 970212

Test on cytomegalovirus (CMV) antigens uses antibody specifically recognising lower matrix protein pp65 of virus as prim. antibody and alkali phosphatase-labelled substance as sec. antibody.

ADVANTAGE - Test is highly specific and permits accurate and rapid testing and thus monitoring treatment of active cytomegalovirus infection.

In an example, 5% dextran-PBS was added to EDTA blood sample from CMV-infected, bone marrow-transplanted patient, which was kept at 37 deg.C for 15 minutes. Supernatant was centrifuged in which a haemolysis reagent was suspended to allow reaction on ice for 5 minutes. After stopping of reaction by addn. of physiological salt water, mixt. was centrifuged and washed with salt water, and procedures repeated 3 times. Final concn. of suspension was adjusted to  $1.5 \times 10^6$  power 6 leucocytes/ml. Analyte slides were prepd. from suspension. Slides were immersed in 0.1% Tween 20 contg. physiological salt water (ST) for 2 minutes. Clonab CMB (Biotest, anti-pp65 antibody-C10 and C11 cocktail were added and allowed to react at room temp. for 1 hr. Reaction mixt. was washed with ST twice, to form colour with colour-forming substrate system at room temp. for 15 minutes which was contrast-stained with a haematoxylin and sealed in HSR soln. Under microscope, positive cells with nucleus stained red to red purple were observed at rate of 243 cells per  $1.5 \times 10^6$  power 5 leucocytes.  
Dwg.1/3

L138 ANSWER 5 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 96-432860 [43] WPIDS

DOC. NO. NON-CPI: N96-364803

DOC. NO. CPI: C96-135767

TITLE: Cleaning of large bone grafts - by immersing done in soln . contg. solvent for bone marrow and applying vacuum through prepd. opening in intact bone.

DERWENT CLASS: A96 D22 E19 P34

INVENTOR(S): WOLFINBARGER, L

PATENT ASSIGNEE(S): (LIFE-N) LIFENET RES FOUND

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5556379	A	960917	(9643)*		20

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5556379	A	CIP of	US 94-293206 940819

US 95-395113 950227

PRIORITY APPLN. INFO: US 95-395113 950227; US 94-293206 940819

AN 96-432860 [43] WPIDS

AB US 5556379 A UPAB: 961025

Large bone grafts are cleaned as follows: (a) excess cartilage is removed from at least 1 articulating surface of a large substantially intact bone; (b) an opening through the cortical layer of the bone is prepd. to permit access of a vacuum line to the bone cavity, and the line is attached; (c) the bone is immersed in a soln. (A2) contg. at least 1 solvent for bone marrow; and (d) a vacuum is applied to draw (S1) through the cartilaginous articulating surface and then through the cavity to withdraw solubilised bone marrow.

(S1) pref. comprises endotoxin-free deionised/distilled H2O, 1 or more solvents (0.001-2 % esp. 0.01-0.5 % anionic and/or nonionic detergents; esp. polyoxyethylene alcohols, polyethylene glycol, p-isooctylphenylethers, polyoxyethylene nonylphenol, and polyoxyethylene sorbitol esters), and also EtOH (pref. 5-95 % esp. 10-30 % v/v), as well as 1 or more of endotoxin-free deionised/distilled H2O and/or EtOH, and 1 or more antibiotics, antiviral agents, H2O2, permeation enhancers, organic acids, and dil. solns. of strong acids.

ADVANTAGE - The method with min. handling and processing provides large bone graft material which is essentially free of residual bone marrow, and which may be used in the prepn. of small bone grafts. Thus transmission of infective agents (bacteria and viruses, esp. HIV) is reduced, while structural damage to the cancellous bone is minimised.  
Dwg.0/8

L138 ANSWER 6 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 96-255080 [26] WPIDS

DOC. NO. CPI: C96-080886

TITLE: Isolation of erythrocytes - by passing sample through filter which traps leukocytes but allows through erythrocytes.

DERWENT CLASS: A96 B04

PATENT ASSIGNEE(S): (ASAH) ASAH MEDICAL CO LTD

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 08104643	A	960423	(9626)*		4

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
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JP 08104643 A

JP 94-264379

941005

PRIORITY APPLN. INFO: JP 94-264379 941005

AN 96-255080 [26] WPIDS

AB JP08104643 A UPAB: 960705

Isolation of erythrocytes from a cell population contg. erythrocytes, haematopoietic stem cells and/or haematopoietic precursor cells uses a filter which substantially passes erythrocytes and catches leukocytes, and then washing the filtrate with counter current flow to recover the leukocytes, partic. using a filter which passes platelets.

USE/ADVANTAGE - Fractionation of blood for bone marrow transplantation. Rapid, low cost separation of erythrocytes without centrifugation or specific reagent.

Cell populations contg. erythrocytes, haematopoietic stem cells and/or haematopoietic precursor cells are filtered through a filter (e.g. nylon wool) to pass through erythrocytes. The leukocytes are caught in the filter which is washed with counter current flow to recover leukocytes.

In a housing of 2.15 x 2.15 cm, bonded fibre fabric having average diameter of 3.9 micron was packed to give filter area of 1.8 x 1.8 cm and sterilised with ethylene oxide gas. Three ml of buffy coat contg. 800,000,000 of total cells, 100,000,000 of leukocytes, 300,00,000 of erythrocytes and 400,000,000 of platelets was diluted with 20 ml of Hank's soln. and filtered through the filter. Then, 20 ml of Hank's soln. was counter currently flowed to recover leukocytes. The recovery rate of leukocytes was 93% and removal rate of erythrocytes and platelets was 90% and 20%, respectively.

Dwg.0/0

L138 ANSWER 7 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 96-251886 [25] WPIDS

DOC. NO. NON-CPI: N96-211616

DOC. NO. CPI: C96-079793

TITLE: Body fluid separator for separating e.g. cells for screening - has filter between chambers with vacuum connection and may be formed as multi-chamber plates.

DERWENT CLASS: B04 J04 S03

INVENTOR(S): ROBERTSON, P M B; ROBERTSON, P M

PATENT ASSIGNEE(S): (PHOE-N) PHOENIX MEDICAL LTD

COUNTRY COUNT: 68

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 9614578 A1 960517 (9625)\* EN 21

RW: AT BE CH DE DK ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD  
 SE SZ UG  
 W: AL AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU  
 IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO  
 NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN  
 AU 9538125 A 960531 (9639)  
 EP 791175 A1 970827 (9739) EN  
 R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9614578	A1	WO 95-GB2599	951106
AU 9538125	A	AU 95-38125	951106
		WO 95-GB2599	951106
EP 791175	A1	EP 95-936039	951106
		WO 95-GB2599	951106

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9538125	A Based on	WO 9614578
EP 791175	A1 Based on	WO 9614578

PRIORITY APPLN. INFO: GB 94-22504 941108

AN 96-251886 [25] WPIDS

AB WO 9614578 A UPAB: 960625

A body fluid separator comprises at least one first chamber with a filter extending across it, at least one second chamber to cooperate with the first, and a connection to vacuum for one or both chambers.

USE - For sepn. of blood, bone marrow, semen, urine and saliva components for testing, e.g. for isolating foetal trophoblasts from maternal blood for screening for genetic disorders.

ADVANTAGE - Is of simple design and low cost, and is easy to use.

Dwg.2/3

L138 ANSWER 8 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 96-008866 [01] WPIDS

DOC. NO. CPI: C96-002594

TITLE: Removal of bone marrow from allograft(s) - by leaving spongy bone fragments to stand for 24 h. in soln. contg 20 units/ml terryllitin, then washing for 10 min. at 30-40 deg.C..

DERWENT CLASS: B04 D22

INVENTOR(S): BELLENDIR, E N; SALMAGAMBETOV, I U; TIKHODEEV, S A



PATENT ASSIGNEE(S): (LENI-R) LENG D PHYHYSIO-PULMONOLOGY RES INST  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
RU 2033795	C1	950430	(9601)*		5

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
RU 2033795	C1	SU 92-5056100	920708

PRIORITY APPLN. INFO: SU 92-5056100 920708

AN 96-008866 [01] WPIDS  
AB RU 2033795 C UPAB: 960108

A greater proportion of bone marrow can be removed from spongy bone allografts by prediluting the necrotised fragment in a proteolytic enzyme soln.. Before the fragment is washed with jets of physiological soln. for 10 min., it is left to stand for 24 h. in terryllitin of 20 proteolytic units/ml concn..

USE - In medicine, specifically in prepn. of spongy bone allografts.

ADVANTAGE - Bone graft washing  
time is cut from 30 to 10 min. and amt. of bone marrow removed is increased by 13.6%.

Dwg.0/0

L138 ANSWER 9 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 95-253139 [33] WPIDS

DOC. NO. CPI: C95-115819

TITLE: A.S. Imamalyev method of preserving bones for transplantation - comprises bactericidal and immunological treatment of cleaned bone, followed by sealing in prescribed containers and cooling.

DERWENT CLASS: B04 D22

INVENTOR(S): IMAMALIEV, A S; IMAMALIEV, M A

PATENT ASSIGNEE(S): (MOMS) MOSC MED STOMATOLOGY INST

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
RU 2026617	C1	950120	(9533)*		3

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
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RU 2026617 C1 SU 91-4946886 910618

PRIORITY APPLN. INFO: SU 91-4946886 910618

AN 95-253139 [33] WPIDS

AB RU 2026617 C UPAB: 950824

A better method of preserving bones for use in **transplants** is proposed by A.S. Imamayev. The bone is extracted from a cadaver, soft tissues, **marrow** and **periosteum** re~~ptd.~~, the **bone** disinfected and given a standard immunological treatment. The bone is then placed in a sterile container which may be **vacuumed** or filled with preserving gas, and sealed in a polymer envelope by immersion in molten polymer. Subsequent cooling completes the process.

USE - In stomatology.

ADVANTAGE - The bones preserved by above method can be stored for 5 or more years without loss of quality.  
Dwg.0/0

L138 ANSWER 10 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 94-102259 [13] WPIDS

DOC. NO. NON-CPI: N94-079794

TITLE: Motor-driven milling system esp. for hip joint prosthesis - has control system for using measured sound emission from bone, optical and/or acoustic signals and/or automatic interruption of process.

DERWENT CLASS: P31 P32 S05 X25

INVENTOR(S): SCHMIDT, J

PATENT ASSIGNEE(S): (SCHM-I) SCHMIDT J

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 4231101	A1	940324	(9413)*		4

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 4231101	A1	DE 92-4231101	920917

PRIORITY APPLN. INFO: DE 92-4231101 920917

AN 94-102259 [13] WPIDS

AB DE 4231101 A UPAB: 940517

The milling head (3) is fitted to the end of a sleeve (1) in an opening (2) which may take a variety of forms allowing operation of the head in one direction only. Rising and **evacuating** devices are installed in the sleeve or connected separately to the

head.

The operation is controlled by a device which measures acoustic emission from the bone under treatment and may be held, screwed or clamped to the bone.

USE/ADVANTAGE - Pref. in replacement of artificial hip joints, and facilitates orthopaedic surgery by milling, flushing and suction. Cement can be removed more quickly from bone marrow cavities or other sites without damage to bone even in unobservable regions.  
Dwg.1/2

L138 ANSWER 11 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 94-048426 [06] WPIDS  
 DOC. NO. NON-CPI: N94-038170  
 DOC. NO. CPI: C94-021832  
 TITLE: Immobilising target cells on solid phase by immune complex formation - is followed by recovery of selected cells by hapten competition, esp. to purify bone marrow cells for transplantation; also new CD34 specific monoclonal antibody.  
 DERWENT CLASS: B04 D16 S03  
 INVENTOR(S): KESSLER, S  
 PATENT ASSIGNEE(S): (KESS-I) KESSLER S  
 COUNTRY COUNT: 26  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9402016	A1	940203	(9406)*	EN	84
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
W: AU CA JP KR NO NZ PL RU UA					
AU 9349937	A	940214	(9425)		
EP 652703	A1	950517	(9524)	EN	
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
EP 652703	A4	960529	(9644)		
AU 678179	B	970522	(9729)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9402016	A1	WO 93-US7005	930727
AU 9349937	A	AU 93-49937	930727
		WO 93-US7005	930727
EP 652703	A1	EP 93-919834	930727
		WO 93-US7005	930727
EP 652703	A4	EP 93-919834	
AU 678179	B	AU 93-49937	930727

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9349937	A	Based on	WO 9402016
EP 652703	A1	Based on	WO 9402016
AU 678179	B	Previous Publ. Based on	AU 9349937 WO 9402016

PRIORITY APPLN. INFO: US 92-921049 920728

AN 94-048426 [06] WPIDS

AB WO 9402016 A UPAB: 940322

Target cells (TC) are immobilised on a solid matrix or support by: (1) reacting a heterogeneous cell population, including TC, with a prim. immune reactant (A), specific for TC and opt. conjugated to a soluble hapten, to form an (A)-TC complex; (2) reacting this complex with at least one second immune reactant (B), at least one binding specifically to (A) and at least one conjugated to a soluble hapten (if (A)) is not so conjugated) to form a (B)-(A)-TC complex; (3) reacting this second complex with a solid material having (in)directly bound to it an antibody (Ab) specific for the soluble hapten, so that the complex is immobilised as a hapten/Ab complex.

Also new are (1) immobilised TC-contg. materials produced; (2) positive immunoselection of TC by dissociating TC from the products by hapten competition (i.e. treatment with a soln. contg. excess soluble hapten); (3) the immuno-selected cells themselves; (4) kits for this process; (5) monoclonal antibody K6.1 (and its equivalents) produced by the new cell line ATCC HB 11085.

USE/ADVANTAGE - The method is esp. used where TC are stem or progenitor cells, esp. human pluripotent lympho-haematopoietic cells. The cells are useful in **bone marrow**

**transplants** (for autologous, heterologous or allogenic recipients) and may then include tumour-infiltrating lymphocytes, lymphocyte-activated killer cells, cytotoxic lymphocytes or CD4 positive helper cells. Selected TC can also be used for research (e.g. screening growth factors and drugs) or for gene therapy. The method produces TC of higher purity (e.g. over 99.95% CD34 positive cells) than known methods, so that smaller doses will be required for bone marrow repopulation. Also cell disturbed (allowing further immune selection); recovered cells are less fragile and less of expensive reagents is required. Cell purity can be assessed without addn. of foreign or unrelated cells.

Dwg.0/13

L138 ANSWER 12 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 93-188518 [23] WPIDS

CROSS REFERENCE: 87-235295 [33]; 93-226612 [28]

DOC. NO. CPI: C93-083490

TITLE: Positive immuno-selection of target cells - comprises using biotinylated antisera, antibodies or fragments reactive with the cells and

immobilised avidin.  
 DERWENT CLASS: B04 D16  
 INVENTOR(S): BENSINGER, W I; BERENSON, R J  
 PATENT ASSIGNEE(S): (HUTC-N) HUTCHINSON CANCER RES CENT FRED  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5215927	A	930601	(9323)*		9

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5215927	A	CIP of	US 86-824178 860130
		Cont of	US 87-111530 870309
		Cont of	US 90-631765 901221
			US 91-739911 910802

PRIORITY APPLN. INFO: US 87-111530 870309; US 86-824178 860130; US 90-631765 901221; US 91-739911 910802

AN 93-188518 [23] WPIDS  
 CR 87-235295 [33]; 93-226612 [28]  
 AB US 5215927 A UPAB: 951102

Positive immunoselection of target cells from heterogeneous suspension contg. the cells comprises: (a) reacting the suspension with biotinylated antisera, antibodies or fragments of these capable of reacting with the target cells to form biotinylated cell complexes; (b) passing the suspension without static incubation through a pre-sterilised column or cartridge comprising immobilised avidin to retain selectively the biotinylated cell complexes in the column or cartridge; (c) agitating the complexes to dissociate the target cells from the immobilised avidin; and (d) sepg. the target cells from the immobilised avidin to recover the target cells in enriched form.

USE/ADVANTAGE - Method can be used for the rapid and reliable sepn. of specific cell populations from e.g. peripheral blood or bone marrow. The recovered cells are viable and functional. The method is partic. useful for sepg. large numbers of haematopoietic precursors necessary for human stem cell transplants or lymphokine-activated killer cells for tumour therapy.

The method can also be used to separate cells useful for treating e.g. thyroid diseases, AIDS, multiple sclerosis, atherosclerosis, haematological disorders or genetic diseases. It can further be used in removal of T cells or tumour cells from bone marrow. (Amended abstract reprinted in week 9442)

Dwg.2/9

USE - For retrieving and storing refrigerant from a cooling

system having a low pressure side and a high pressure side.

Dwg.2/9

Dwg.2/9

L138 ANSWER 13 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 92-364105 [44] WPIDS  
 DOC. NO. NON-CPI: N92-277386  
 DOC. NO. CPI: C92-161847  
 TITLE: **Sterilisation of tubular demineralised bone graft - by electrophoresis at room temp. using silver nitrate soln. to speed up procedure.**  
 DERWENT CLASS: D22 J03 P34  
 INVENTOR(S): AFINOGENOV, G E; SAVELEV, V I; ZHIRNOV, V A  
 PATENT ASSIGNEE(S): (LETR-R) LENG D TRAUMATOLOGY ORTHOPEADY RES INST  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 1701324	A1	911230	(9244)*		2

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
SU 1701324	A1	SU 89-4682731	890424

PRIORITY APPLN. INFO: SU 89-4682731 890424

AN 92-364105 [44] WPIDS

AB SU 1701324 A UPAB: 931116

Antimicrobial activity in transplants sterilised using the method is considerably higher than in those from non-electrophoretic techniques. Sterilisation time is reduced to 2 hr., against 1-7 hr. with conventional methods.

After femoral or tibial bone grafts from cadavers have been demineralised with HCl soln., they are saturated with a 3% AgNO3 soln. using electrophoresis. This proceeds at room temp. for 2 hr. with a 50 mA current, one rod-type electrode being inserted into the graft and the other, a foil sheet, being wrapped round the bone to form a cylinder. Hydrophilic padding moistened with the antiseptic is used to facilitate impregnation.

**USE/ADVANTAGE - In transplantation technology, a quicker bone graft sterilisation method.**

Bul.48/30.12.91

Dwg. 0/0

L138 ANSWER 14 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 91-148535 [20] WPIDS

CROSS REFERENCE: 90-115809 [15]; 92-432970 [52]; 93-075765 [09];  
 94-091499 [11]  
 DOC. NO. CPI: C91-064208  
 TITLE: Production of bone marrow cell growth factor  
 stimulating granulocyte - by adding di  
 thiocarbamate to in vitro bone marrow culture  
 medium, used to protect against toxicity of  
 anticancer drugs or radiation.  
 DERWENT CLASS: B05 D16  
 INVENTOR(S): BORCH, R F; SCHMALBACH, T K  
 PATENT ASSIGNEE(S): (UYRP) UNIV ROCHESTER  
 COUNTRY COUNT: 17  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9105571	A	910502	(9120)*		
RW: AT BE CH DE DK ES FR GB IT LU NL SE					
W: AU CA DK JP					
AU 9066471	A	910615	(9133)		
US 5035878	A	910730	(9133)		
NZ 235673	A	930326	(9316)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5035878	A	US 89-418549	891010
NZ 235673	A	NZ 90-235673	901012

PRIORITY APPLN. INFO: US 89-418549 891010; US 90-83226 900921; US  
 90-586304 900921

AN 91-148535 [20] WPIDS  
 CR 90-115809 [15]; 92-432970 [52]; 93-075765 [09]; 94-091499 [11]  
 AB WO 9105571 A UPAB: 950502

Prodn. of at least one bone marrow cell growth factor with  
 granulocyte/macrophage progenitor cell colony stimulating activity  
 comprises: (a) adding a dithiocarbamate compound of formula  
 $R_1R_2NC(=S)SM(I)$ , to the culture medium of an in vitro, established  
 bone marrow culture, (b) separating (I)  
 from the culture, adding fresh culture medium to the culture and  
 allowing the concentration of growth factor(s) to increase in the  
 fresh culture medium and (c) sepg. the fresh culture medium from the  
 in vitro treated bone marrow culture to isolate the growth  
 factor(s). (where  $R_1, R_2$  = a lower aliphatic, cycloaliphatic or  
 heterocycloaliphatic group, optionally substituted by OH. One of  $R_1$   
 and  $R_2$  may also be H, or  $R_1$  and 2 together may form an aliphatic 5-  
 or 6-membered N-heterocyclic ring optionally interrupted by an O or  
 second N atom. M = H or 1 equivalent of a cation (the remainder of  
 the molecule is negatively charged) or is  $-S-C(=S)-R_3R_4$ .  $R_3, R_4$  =

the same as R1 and R2). The amts. of (I) used in the culture is 0.1-1.0 (0.2-0.5) millimoles per litre of culture medium. Also claimed is a composition comprising (I) and a medium, a method for the treatment of damage to the blood forming fuction of the bone marrow by administering (I) and a method for stimulating proliferation of cells in the bone marrow of a bone marrow transplant. Dose is 0.01-10 mg/kg of (I).

USE/ADVANTAGE - (I) are myelosuppression treatment agents used to protect against the bone marrow toxicity of anticancer drugs or radiation. @ (52pp Dwg.No.0/0)  
0/0

ABEQ US 5035878 A UPAB: 930928

Treatment of myelosuppression caused by cytotoxic Pt-free DNA-synthesis inhibitors or drugs contg. alkylating 2-chloroethyl cpds. comprises admin. of an ED50 (0.03-145 mg/m2 surface area and not above 10 mg/kg) of dithiocarbamate cpd. (I) of formula  $R_1R_2NC(=S)XM$ . R1 and R2 are each 1-6C-aliphatic, cycloaliphatic or heterocycloaliphatic gps. opt. substd. by OH or one but not both can be H or R1 and R2 together with the N atom can be 5- or 6-membered N-heterocyclic ring, which is aliphatic opt. interrupted by ring O or 2nd ring N atom; M is H or cation or M is  $-SC(=S)NR_1R_2$ .

Pref. (I) is 1-3-bis-(2-chloroethyl)-1-nitrosourea. Pref. compsns. contg. the ED50 dosage dissolved in aq. medium for p.e. or i.v. admin.

USE - These cpds. alleviate damage to blood-forming bone marrow cells after anticancer treatments with antineoplastic drugs, without side effects.

L138 ANSWER 15 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 91-000590 [01] WPIDS

DOC. NO. NON-CPI: N91-000481

DOC. NO. CPI: C91-000268

TITLE: Magnetic protein conjugate - used to prevent rejection of bone marrow transplants.

DERWENT CLASS: B04 S03

INVENTOR(S): DONGES, R; ENSSLE, K; FRANSSEN, U; HERMENTIN, P; KURRLE, R; SEILER, F R

PATENT ASSIGNEE(S): (BEHW) BEHRINGWERKE AG

COUNTRY COUNT: 17

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 3919923	A	901220	(9101)*		
EP 403960	A	901227	(9101)		
R: AT BE CH DE ES FR GB GR IT LI LU NL SE					
AU 9057179	A	901220	(9107)		
PT 94399	A	910208	(9109)		
CA 2019217	A	901219	(9111)		
JP 03041098	A	910221	(9114)		



APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 3919923	A	DE 89-3919923	890619
EP 403960	A	EP 90-111263	900614
JP 03041098	A	JP 90-157800	900618

PRIORITY APPLN. INFO: DE 89-3919923 890619

AN 91-000590 [01] WPIDS

AB DE 3919923 A UPAB: 930928

The protein conjugate is of formula  $M-NH-CO-(CH_2)_n-S-S-P$  (I) M is a dispersible magnetic material or particle contg amino gps; n is 1-6; P is a protein, and may be a polyclonal immunoglobulin, an IgG- or IgM monoclonal antibody or a Fab-, Fab'- or F(ab')<sub>2</sub>- fragment; an antigen or an enzyme-, hormone- lectin- or growth-factor. The monoclonal antibody may be obtd from B-lymphocytes, T-lymphocytes or bone marrow tumour cell precursors.

USE/ADVANTAGE - To remove T-lymphocytes from donor bone marrow before transplants to

prevent graft-versus-host reactions. (I) can also be used to remove tumour cells from bone marrow. It

is also used as a diagnostic agent for HLA characterisation. (I) is highly specific. It is stable, but can also be cleaved at the sulphide bridge. This means that the magnetic particles can be recovered from depleted solns of (I) and re-used.

0/0

L138 ANSWER 16 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 89-285732 [40] WPIDS

DOC. NO. NON-CPI: N89-218143

DOC. NO. CPI: C89-126555

TITLE: Determn. of erythrocyte creatine content - by enzymatic analysis after cell lysis and salting out of haemoglobin.

DERWENT CLASS: B04 D16 S03

PATENT ASSIGNEE(S): (DEBU-I) DE BUYZERE M L

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
BE 1001303	A	890919	(8940)*		4

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
BE 1001303	A	BE 87-1419	871211

PRIORITY APPLN. INFO: BE 87-1419 871211

AN 89-285732 [40] WPIDS

AB BE 1001303 A UPAB: 930923

Determin. of the creatine content of red blood cells (RBC) is effected by treating a RBC suspension with a detergent and sufficient salt to insolubilise the haemoglobin; filtering the suspension under **reduced pressure**; and measuring the creatine content of the filtrate using creatinase.

USE/ADVANTAGE - The process is useful for determining the age of blood samples, monitoring **bone-marrow transplantation** patients, and assessing the quality of stored blood. Prior removal of haemoglobin eliminates interference with colorimetric analysis (Fl).  
0/0

L138 ANSWER 17 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 88-249643 [35] WPIDS

DOC. NO. NON-CPI: N88-190140

TITLE: Suction drainage bone screw - has continuous longitudinal bore through which medullary canal can be **evacuated** during bone cement application.

DERWENT CLASS: P31 P32 P34

INVENTOR(S): DRAENERT, K

PATENT ASSIGNEE(S): (DRAE-I) DRAENERT K

COUNTRY COUNT: 13

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 8806023	A	880825	(8835)*	EN	21
RW: AT BE CH DE FR GB IT LU NL SE					
W: JP US					
EP 305417	A	890308	(8910)	EN	
R: AT BE CH DE FR GB IT LI LU NL SE					
JP 01502402	W	890824	(8940)		
US 5047030	A	910910	(9139)		
US 5192282	A	930309	(9312)		7
EP 305417	B1	950628	(9530)	EN	12
R: AT BE CH DE FR GB IT LI LU NL SE					
DE 3854067	G	950803	(9536)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 8806023	A	WO 88-EP122	880219
EP 305417	A	EP 88-901601	880219
US 5047030	A	US 90-541099	900620
US 5192282	A Div ex	US 90-541099	900620

EP 305417	B1	US 91-756835	910909
		EP 88-901601	880219
		WO 88-EP122	880219
DE 3854067	G	DE 88-3854067	880219
		EP 88-901601	880219
		WO 88-EP122	880219

FILING DETAILS:

PATENT NO	KIND		PATENT NO
US 5192282	A	Div ex	US 5047030
EP 305417	B1	Based on	WO 8806023
DE 3854067	G	Based on	EP 305417
		Based on	WO 8806023

PRIORITY APPLN. INFO: DE 87-3705541 870220

AN 88-249643 [35] WPIDS

AB WO 8806023 A UPAB: 930923

The bone screw (10) has a continuous longitudinal bore in its interior, and one or several bores which contact the longitudinal bore (15). The tip of the thread of the screw is designed as a thread-forming screw. The screw is made of an extremely pure surgical steel or of titanium or a titanium alloy, and at least part of the screw is made of an absorbable material. The screw has an outer dia. of about 5 to 6.5 mm, a core dia. of about 4 to 5 mm, a thread pitch of about 1.5 to 2.5 mm and a thread length of about 15 to 25mm.

USE - For anchoring in a bore in a firm and vacuum-tight manner, as part of a bore cement application or drug-delivery system.  
2A/5

ABEQ US 5047030 A UPAB: 930923

The bone screw comprises a threaded portion at a front end of the bone screw, the threaded portion having a core diameter. A tubular member is connected to the threaded portion, the tubular member having having a diameter greater than the core diameter of the threaded portion.

A sleeve portion is provided at a rear end of the tubular member opposite the threaded portion, the sleeve portion adapted to be engaged by a handle. A connection piece connect a vacuum line to the tubular member, the connection piece being provided at the rear end of the tubular member adjacent the sleeve portion.

USE - A bone screw to be firmly anchored in bone in an essentially vacuum-tight manner.

ABEQ US 5192282 A UPAB: 930923

The method provides bone screws each having a continuous bore establishing a communication canal between the first and second ends. Then inserting the first end of each bone screw into the bone such that each bone screw is firmly anchored in the bone in a vacuum-tight manner. Finally delivering substances to or

from the interior of the bone through the communication canal of each bone screw. The step of delivering substances includes the step of removing blood, fat and bone marrow from the interior of the bone through the communication canal of a first bone screw by suction drainage. ADVANTAGE - Can be anchored in the bone in a firm and vacuum-tight manner.

2a/5

ABEQ EP 305417 B UPAB: 950804

A bone screw (1,10) being designed as a thread-forming screw and being threaded (2,12) to be firmly anchored in the bone in a vacuum-tight manner, the bone screw having a continuous longitudinal bore (3,15) in its interior and comprising a connection piece (5,22) adapted for receiving a vacuum line.  
Dwg.1/5

L138 ANSWER 18 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 84-317551 [51] WPIDS

DOC. NO. NON-CPI: N84-236878

TITLE: Cadaver bone marrow taking from bodies of vertebrae - by puncture of bodies of vertebrae from dorsal side.

DERWENT CLASS: P31

INVENTOR(S): KOKOULIN, B E; KRYAZH, E V

PATENT ASSIGNEE(S): (KIRO-R) KIROV BLOOD TRANSFU

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 1090367	A	840507	(8451)*		2

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
SU 1090367	A	SU 82-3460300	820628

PRIORITY APPLN. INFO: SU 82-3460300 820628

AN 84-317551 [51] WPIDS

AB SU 1090367 A UPAB: 930925

The method is carried out using a wooden bolster 12 cm in diameter positioned consecutively under each part of the body where bone marrow is to be taken from the vertebrae, to move the spinous processes apart and the bodies of the vertebrae together. A needle is positioned between the spinous processes at an 80-90 degree angle to the skin and taken by twisting between the vertebrae to the canal, then slanted at 40-50 degrees and introduced by twisting into the body of the vertebra. Then the mandren is removed and aspiration of bone marrow performed by a system with a vacuum pump or syringe. Myeloexfusion from the body

of the upper vertebra is performed by 2-3 punctures of the spongy matter, then the direction of the needle changed to the lower vertebra without additional skin puncture.

USE - For obtaining of a large number of viable bone marrow cells. Bul.17/7.5.84  
0/0

L138 ANSWER 19 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
ACCESSION NUMBER: 84-300099 [48] WPIDS  
DOC. NO. NON-CPI: N84-223689  
TITLE: **Bone marrow transplant**  
appts. - has electronically controlled valve and fluid-flow control unit and replaces with intravenous solution while withdrawing blood.  
DERWENT CLASS: P34 S05  
INVENTOR(S): FARRISH, D T  
PATENT ASSIGNEE(S): (ALTS-I) ALTSHULER J H  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 4481946	A	841113	(8448)*		10

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 4481946	A	US 80-177875	800814

PRIORITY APPLN. INFO: US 80-177875 800814; US 82-366591 820408  
AN 84-300099 [48] WPIDS  
AB US 4481946 A UPAB: 930925

The appts. includes a chamber between an aspiration needle and a bone marrow collector to establish fluid communication between them. A second chamber is placed between a second aspiration needle and an intravenous solution source. A fluid flow control device regulates the pressure level within each of said chambers such that the pressure level in the first chamber is variable between a negative pressure to induce the removal of bone marrow from the bone marrow

site into the chamber and a positive pressure level operative to force the bone marrow recovered into the bone marrow collector.

The pressure level in the second chamber is variable between a negative pressure level to induce the flow of intravenous solution from the intravenous solution source into the second chamber and a positive pressure level to cause the solution to flow the said second chamber through the second aspiration needle into the bone marrow site.

ADVANTAGE Eliminates stretching or activation of nerve stretch receptors in marrow cavity.

0/9

L138 ANSWER 20 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 83-819193 [46] WPIDS  
 DOC. NO. NON-CPI: N83-206116  
 TITLE: Underdeveloped lower jaw treatment - with 100-110 degree angle osteotomy with apex beyond lower jaw canal entrance.  
 DERWENT CLASS: P31  
 INVENTOR(S): VODOLATSKI, M P  
 PATENT ASSIGNEE(S): (STAV-R) STAVROPOL MED INST  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 990194	A	830128	(8346)*		2

PRIORITY APPLN. INFO: SU 80-2984700 800924

AN 83-819193 [46] WPIDS

AB SU 990194 A UPAB: 930925

The method of treatment for under development of the lower jaw involves performing osteotomy, moving the lower jaw fragments and then filling in the defect between them with a **transplant**.

In order to reduce the time required for treatment and to restore the function of the lower jaw, the osteotomy is performed at an angle of 100-110 degrees with its apex positioned behind the entrance to the lower jaw canal, and then the body of the lower jaw is moved downwards and forwards, after which the defect is filled in with an allotransplant of preserved bone taken from the branch of the jaw.

The **solution** in which the **transplant** is kept should be changed 3-4 times before it is used to remove **bone marrow**, assure

reliable sterilisation and remove traces of preservative. Through apertures are drilled in it 8-10mm apart and when it is implanted they are filled with autogenous bone marrow. Bul.3/23.1.83  
 0/0

L138 ANSWER 21 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 83-789787 [42] WPIDS  
 DOC. NO. NON-CPI: N83-183500  
 DOC. NO. CPI: C83-099931  
 TITLE: Marrow taken from bone to store by pump - is replaced by intravenous **soln..**  
 DERWENT CLASS: D22 P34 S05  
 INVENTOR(S): ALTSCHULER, J H; FARRISH, D

PATENT ASSIGNEE(S): (MEDI-N) APPL MED DEVICES IN  
 COUNTRY COUNT: 5  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 3213638	A	831013	(8342)*		19
GB 2118044	A	831026	(8343)		
FR 2524802	A	831014	(8346)		
JP 58177901	A	831018	(8347)		
CA 1183751	A	850312	(8515)		
GB 2118044	B	850829	(8535)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
GB 2118044	A	GB 82-10487	820408

PRIORITY APPLN. INFO: DE 82-3213638 820413

AN 83-789787 [42] WPIDS

AB DE 3213638 A UPAB: 930925

**Bone marrow is removed or replaced by**  
 an injector pump controllably connected to a marrow collector and a storage container. The collector has one or more suction pipes connected to needles which can be operated alternately or simultaneously. Marrow extracted from a bone is replaced by intravenous soln. which may be pumped in at one point while marrow is being extracted at an adjacent point. The pump may have first and second chambers connected to the suction and injection pipes resp., with a mobile slider reciprocating a piston in both chambers; the size of one chamber increases, and that of the other chamber decreases. Marrow flow through conduits is controlled by solenoid valves.

Used for **transplants** of healthy marrow by donors, or for temporary removal of marrow for protection during some forms of chemotherapy. Transfer is rapid and relatively painless, since nerve fibre receptors are not dilated.

0/9

ABEQ GB 2118044 B UPAB: 930925

A bone marrow **transplant** apparatus comprising: pump means connected to a bone marrow collecting means, a storage means, and a **solution** means, said **solution** means being adapted to be connected to a source of marrow-replacing **solution**, and including an infusion means connected to said pump means and adapted to be inserted at the same bone marrow site as said bone marrow collecting means; and a pump control means for activating said pump means which is operative in use of the apparatus on one cycle selectively to aspirate bone marrow through said bone marrow collecting means and to infuse marrow-replacing **solution**

through said infusion means into the same site and on an alternate cycle selectively to direct the collected marrow into said storage means.

L138 ANSWER 22 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 83-63372K [26] WPIDS  
 DOC. NO. CPI: C83-061529  
 TITLE: Processing preserved spongy bone  
 graft before transplantation -  
 includes multistage vacuum treatment for  
 recovery of bone marrow cells  
 and conserving fluids.  
 DERWENT CLASS: D22  
 INVENTOR(S): SKRIPNYUK, P A  
 PATENT ASSIGNEE(S): (KIOR-R) KIEV ORTHOPAEDIC RE  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 952189	B	820828	(8326)*		2

PRIORITY APPLN. INFO: SU 80-2974788 800819

AN 83-63372K [26] WPIDS

AB SU 952189 B UPAB: 930925

Bone marrow cells and preserving fluids are recovered mechanically from a spongy bone transplant. They are recovered more completely from spongy material by subjecting the graft to a reduced pressure of 0.266g/Pa-0.133 g/Pa.

The vessel contg. the grafts in the fluid is placed under a glass bell, which is evacuated to a press of 0.266 g/Pa-.133 g/Pa for 2-3 min. The press. is then raised to atmos. over a 3 min. period, and the soln. in the vessel is decanted. The grafts are treated with further portions of physiological fluid and again put under vacuum; this process is repeated a 3rd time.

Treatment in this manner reduces the antigen activity of the spongy bone grafts. Spongy bone tissue preserved in liquid N2 at minus 196 deg. C, is cut into strips steeped in a physiological soln. (200ml per 20 cu.cm.) and treated as above.  
 Bul.31/23.8.82.

L138 ANSWER 23 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 81-G0088D [26] WPIDS  
 TITLE: Device for taking and transplanting  
 bone marrow - has suction unit  
 with concentric preservative supply and  
 bone marrow suction channels



equipped with monitors.  
 DERWENT CLASS: P34  
 INVENTOR(S): DUSHIN, I I; PUSHKAR, N S; ZAGOROVSKI, Y U I  
 PATENT ASSIGNEE(S): (ZAGO-I) ZAGOROVSKII YU I  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 768400	B	801007	(8126)*		

PRIORITY APPLN. INFO: SU 78-2593250 780322

AN 81-G0088D [26] WPIDS  
 AB SU 768400 B UPAB: 930915

The device has mains for suction and preservative supply, joined to a suction unit (1) with concentric channels: inner channel (2) for preservative supply and outer channel (3) for bone marrow mixture suction. Inner channel (2) is joined by tube (4) through preservative quantity meter (5) and feed regulator (6) to a roller pump (7) joined by tube (8) to preservative container (9) whose air inlet tube (10) has a bactericide filter.

The preservative quantity meter (5) works by counting the rotations of the roller pump's rotor, given that the quantity of preservative expelled with each rotation is known. Regulators (6) regulates the number of rotations per unit of time. Suction unit (1)'s outer channel is joined by tube (11) to bone marrow mixture container (12) joined by tube (13) through dilution regulator (14) to vacuum pump (15). The dilution regulator (14) is in the form of bellows with electromagnetic core joined to the control unit. Bul.37/7.10.80.

L138 ANSWER 24 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 79-57645B [31] WPIDS  
 TITLE:

Spongy bone transplant treatment -  
 includes washing with physiological saline  
 soln., to remove marrow before cold  
 storage.

DERWENT CLASS: D22 P31  
 INVENTOR(S): BELLENDIR, E N; SALMAGAMBE, I U  
 PATENT ASSIGNEE(S): (LESU-R) LENG D SURG TUBERCUL  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 628888	A	780921	(7931)*		

PRIORITY APPLN. INFO: SU 68-1288827 681208

AN 79-57645B [31] WPIDS

AB SU 628888 A UPAB: 930901

**Bone marrow is removed** from spongy bone homo **transplant** by washing with physiological saline soln. at 30-40 degrees C to preserve the plastic characteristics of **transplant** and accelerate the healing and vascularisation of grafted bone tissue after **transplantation**. The material results in 2-3 times shorter post-operative therapy period.

L138 ANSWER 25 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 77-L2797Y [51] WPIDS

TITLE: Spongy bone **transplant** preserving appts.  
- with chamber having outer funnel wall and spherical inner wall.

DERWENT CLASS: P31

PATENT ASSIGNEE(S): (SALM-R) SALMAGAMBETOV I U

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 543394	A	770315	(7751)*		

PRIORITY APPLN. INFO: SU 68-1292812 681230

AN 77-L2797Y [51] WPIDS

AB SU 543394 A UPAB: 930901

Rig for spongy bone **transplants** preservation comprises an h.p. hydraulic drive, reservoir with **solution** and connecting hoses. To preserve the plastic qualities of the bone substance, it has a chamber made with the outer wall in the form of a funnel and with a spherical inner wall, in which are apertures evenly disposed, with geometric axes directed to the centre of the sphere.

Rotation from the shaft of electric motor (1) is imparted via flexible coupling (2) to the shaft of h.p. pump (3).

**Solution** from reservoir (4) is sucked via filter (9) and hose (7) from reservoir (4), into the h.p. pump, and then goes at 10-15 kg/sq. cm. via hose (6) to chamber (5), in which powerful radial converging jets of **solution** are created. The **transplantate** is put in the centre of the chamber and is washed above reservoir (4) until all the **bone marrow is removed**. Chamber (5) is fixed to reservoir (4) by three removable brackets. **Transplantates** treated in this way knit 2-3 times as fast, thus improving results of restorative operations.

L138 ANSWER 26 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 76-H1092X [32] WPIDS  
 TITLE: **Bone marrow extraction**  
 device - hollow needle linked to collection chamber  
 and to preserving solution dosing chamber.  
 DERWENT CLASS: P34  
 PATENT ASSIGNEE(S): (AUCR-R) AS UKR CRYOGEN BIOL; (KHBL-R) KHARK BLOOD  
 TRANSFUSION; (KHGE-R) KHARK GEN CASUALTY SURG  
 COUNTRY COUNT: 1  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 487642	A	760119	(7632)*		

PRIORITY APPLN. INFO: SU 72-1769740 720410

AN 76-H1092X [32] WPIDS  
 AB SU 487642 A UPAB: 930901

The device for **bone marrow extraction** comprises collection unit, **vacuum pump** with receiver and control block. To prevent clotting of bone marrow and simultaneous dosing of preserving solution into the bone cavity, the solution feed unit has a preservative reservoir with equalising level sensors, linked to a control block and a tube system with an electromagnetic valve. The collection unit has a collector reservoir linked by tube to the **vacuum pump** receiver and level equalising sensors linked to the control block. A hollow needle is connected by tube to the collection chamber and also to the preserving solution dosing chamber.

L138 ANSWER 27 OF 27 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 75-34561W [21] WPIDS  
 TITLE: Medicaments contg bone marrow - isolated in the  
 absence of air.  
 DERWENT CLASS: B04  
 PATENT ASSIGNEE(S): (SOUR-I) SOURON Y M F  
 COUNTRY COUNT: 4  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 2452235	A	750515	(7521)*		
JP 50077515	A	750624	(7534)		
PT 63032	A	751218	(7603)		
FR 2276058	A	760227	(7616)		
FR 2278344	A	760319	(7619)		

PRIORITY APPLN. INFO: FR 73-40385 731108; FR 74-13856 740403; FR

74-23221 740628

AN 75-34561W [21] WPIDS

AB DE 2452235 A UPAB: 930831

A medicament for external use comprises (a) **bone marrow extracted** from the bone in an inert atmosphere (pref. N2) or in **vacuo**, and (b) opt. other components. When isolated in the absence of air, bone marrow has pharmacological properties not possessed by **bone marrow extracted** in the presence of air. e.g. it has an anti-inflammatory action, promotes the healing of open wounds and improves the condition of the blood. The other components can include disinfectants (e.g. alcohol), antioxidants, (e.g. tocopherol), cooking salt or sea salt, and plant extracts in homoeopathic dilutions. The medicament is pref. applied in the form of an ointment, a syrup or an aq. or oil suspension.

=> d his l139-

(FILE 'REGISTRY' ENTERED AT 11:25:33 ON 27 MAR 1998)

FILE 'MEDLINE' ENTERED AT 11:28:41 ON 27 MAR 1998

FILE 'BIOSIS' ENTERED AT 11:29:47 ON 27 MAR 1998

FILE 'EMBASE' ENTERED AT 11:31:47 ON 27 MAR 1998

FILE 'MEDLINE' ENTERED AT 11:34:42 ON 27 MAR 1998

FILE 'WPIDS' ENTERED AT 11:43:11 ON 27 MAR 1998

FILE 'WPIDS, BIOSIS, EMBASE, MEDLINE' ENTERED AT 11:48:59 ON 27 MAR 1998

L139 0 FILE WPIDS  
L140 1 FILE BIOSIS  
L141 3 FILE EMBASE  
L142 2 FILE MEDLINE

TOTAL FOR ALL FILES

L143 6 S L71 AND (PURG? OR IRRIGAT?)  
L144 50 FILE WPIDS  
L145 934 FILE BIOSIS  
L146 1030 FILE EMBASE  
L147 1273 FILE MEDLINE

TOTAL FOR ALL FILES

L148 3287 S (PURG? OR IRRIGAT?) (25A) (BONEMARROW? OR BONEGRAFT? OR B  
L149 1 FILE WPIDS  
L150 0 FILE BIOSIS  
L151 1 FILE EMBASE  
L152 1 FILE MEDLINE

TOTAL FOR ALL FILES

L153 3 S L148 AND L21  
L154 6 FILE WPIDS

L155 6 FILE BIOSIS  
 L156 13 FILE EMBASE  
 L157 18 FILE MEDLINE  
 TOTAL FOR ALL FILES  
 L158 43 S L148 AND L6  
 L159 1 FILE WPIDS  
 L160 1 FILE BIOSIS  
 L161 3 FILE EMBASE  
 L162 4 FILE MEDLINE  
 TOTAL FOR ALL FILES  
 L163 9 S L148 AND L26

FILE 'WPIDS' ENTERED AT 11:55:51 ON 27 MAR 1998  
 L164 6 S (L149 OR L154 OR L159) NOT L138

FILE 'BIOSIS' ENTERED AT 11:56:31 ON 27 MAR 1998  
 L165 8 S (L140 OR L155 OR L160) NOT L136  
 L166 7 S L165 NOT L137

FILE 'EMBASE' ENTERED AT 11:57:16 ON 27 MAR 1998  
 L167 6 S (L141 OR L151 OR L161) NOT L134  
 L168 12 S L156 NOT (L134 OR L135 OR L167)

FILE 'MEDLINE' ENTERED AT 11:58:08 ON 27 MAR 1998  
 L169 5 S (L142 OR L152 OR L162) NOT (L130 OR L131)  
 L170 17 S L157 NOT (L130 OR L131 OR L132 OR L133 OR L169)

=> file wpids

FILE 'WPIDS' ENTERED AT 12:02:03 ON 27 MAR 1998  
 COPYRIGHT (C) 1998 DERWENT INFORMATION LTD

FILE LAST UPDATED: 23 MAR 1998 <19980323/UP>  
 >>>UPDATE WEEKS:  
 MOST RECENT DERWENT WEEK 199812 <199812/DW>  
 DERWENT WEEK FOR CHEMICAL CODING: 199807  
 DERWENT WEEK FOR POLYMER INDEXING: 199809  
 DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE  
 >>> D COST AND SET NOTICE DO NOT REFLECT SUBSCRIBER DISCOUNTS -  
 SEE HELP COST FOR DETAILS <<<  
 >>> CHANGES TO DWPI COVERAGE - SEE NEWS <<<

=> d l164 1-6 ibib abs

L164 ANSWER 1 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 97-132381 [12] WPIDS  
 DOC. NO. CPI: C97-042719  
 TITLE: Fluorogenic substrates for diagnosis and  
 photo-dynamic therapy of tumours - contain masking  
 gps. removable by cell enzymes, partic. those in  
 tumour, give higher ratio of active cpd. in  
 tumour-healthy cells.

DERWENT CLASS: B02 B04 D16 J04  
 INVENTOR(S): BAGLIONI, P; BOTTIROLI, G; CROCE, A C; MONICI, M  
 PATENT ASSIGNEE(S): (CNDR) CONSIGLIO NAZ DELLE RICERCHE  
 COUNTRY COUNT: 71  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9703697	A2	970206	(9712)*	EN	20
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
W: AL AM AU AZ BB BG BR BY CA CN CZ EE GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LV MD MG MK MN MW MX NO NZ PL RO RU SD SG SI SK TJ TM TR TT UA UG US UZ VN					
AU 9667351	A	970218	(9723)		
WO 9703697	A3	970410	(9729)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9703697	A2	WO 96-EP3201	960719
AU 9667351	A	AU 96-67351	960719
WO 9703697	A3	WO 96-EP3201	960719

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9667351	A Based on	WO 9703697

PRIORITY APPLN. INFO: IT 95-MI1560 950719

AN 97-132381 [12] WPIDS

AB WO 9703697 A UPAB: 970320

Fluorogenic substrates (FS), capable of fluorescence emission and photosensitisation activity on enzyme transformation, and suitable for diagnosis and photodynamic therapy of tumours, comprise fluorescent substances with high yield of photosensitisation activity, modified chemically by introducing a gp. which quenches these properties, but is removable by enzyme activity in the tumour cells, with restoration of the fluorescence and photosensitisation properties.

The FS consist of Rose Bengal acetate, phosphate, monobutyrate or dibutyrate; haematoporphyrin or protoporphyrin IX monoacetate, diacetate and phosphate; phthalocyanine monoacetate, diacetate, and phosphate, or hypericin polyacetate or polyphosphate. The FS include derivs. of xanthene, porphyrins, phthalocyanines, chlorines or perylenequinonoid pigments. Quenching gps. include acetate, sulphate, phosphate, dibutyryl ester, galactopyranoside, glucuronide or acetamido-deoxyglucopyranoside.

USE - The substrates are applied in all sectors of diagnosis

and photodynamic therapy in oncology. Partic. reference is to tumours in cavities, in conjunction with fibre optic systems and endoscopy, and to topical tumours. Possible applications are in haematic pathologies and purging of bone marrow for autologous transplant. Systemic admin. is as an isotonic saline soln. or a liposome suspension. Topical admin. is from solns. favouring absorption and penetration of the FS, e.g., as a soln. in 50% i-PrOH contg. ca. 2% azone, a penetrant agent. Amts. are 1-10 mg/kg.

ADVANTAGE - The enzyme removing the quenching gp. in the FS is one expressed in greater quantity in the tumour cells, causing preferential accumulation of the active substance in tumour rather than healthy cells. This results in better distinction in outlining the tumour mass, and less damage to healthy cells.  
Dwg.0/6

L164 ANSWER 2 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 96-171722 [17] WPIDS  
 DOC. NO. NON-CPI: N96-144221  
 DOC. NO. CPI: C96-054250  
 TITLE: Use of milk protein to block non-specific cell adhesion to capture matrix - useful in treatment of bone marrow purging and T cell depletion in allo-graft(s).  
 DERWENT CLASS: B04 D16 S03  
 INVENTOR(S): BERGE, A; KILAAS, L; PRESTVIK, W S; STENSTAD, P; UGELSTAD, J; PRESTVIK, W  
 PATENT ASSIGNEE(S): (DZIE-I) DZIEGLEWSKA H E; (SINV-N) SINVENT AS  
 COUNTRY COUNT: 66  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9607909	A1	960314 (9617)*	EN	36	
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG					
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN					
AU 9533955	A	960327 (9627)			
EP 782704	A1	970709 (9732)	EN		
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9607909	A1	WO 95-GB2094	950905
AU 9533955	A	AU 95-33955	950905
EP 782704	A1	EP 95-930638	950905

WO 95-GB2094 950905

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9533955	A Based on	WO 9607909
EP 782704	A1 Based on	WO 9607909

PRIORITY APPLN. INFO: GB 94-17864 940906

AN 96-171722 [17] WPIDS

AB WO 9607909 A UPAB: 960428

Method for blocking non-specific binding of cells to a solid-phase selective cell-capture **matrix** comprises adding a milk protein to the **matrix**. Also claimed is a method for selectively isolating target cells from a sample, comprising selectively binding the target cells to a solid support by means of a target-specific binding partner and separating the bound cells from the sample, where a milk protein is added to block non-specific binding of non-target cells.

USE - The method is used in disease treatment (e.g. **bone-marrow purging** or T-cell depletion in allografts), disease diagnosis (e.g. detection of bacterial pathogens), biochemistry (e.g. isolation of cell subpopulations for functional studies), blood and tissue typing, food and environmental safety.

ADVANTAGE - Casein is more effective than bovine serum albumin (BSA) in blocking non-specific binding to a variety of solid phases. Dwg.0/0

L164 ANSWER 3 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 95-129925 [17] WPIDS

DOC. NO. NON-CPI: N95-102035

TITLE: Osteomyelitis treatment procedure - combining spinal vertebrae manipulation with **bone marrow channel irrigation**.

DERWENT CLASS: P33

INVENTOR(S): GRITSENKO, A G

PATENT ASSIGNEE(S): (GRIT-I) GRITSENKO A G

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 1836069	A3	930823	(9517)*		3

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
SU 1836069	A3	SU 91-5020395	911227



PRIORITY APPLN. INFO: SU 91-5020395 911227

AN 95-129925 [17] WPIDS

AB SU 1836069 A UPAB: 950508

The procedure consists of raising the patient's overall resistance plus localised treatment for the complaint. The overall resistance is raised by manipulation of the spine at the following vertebral levels: C3-C7, D1-D3, L4-S4 and C01-C03, applying an effort of 15-30 kg/cm2 in 12-15 sessions.

The localised treatment consists of irrigating the bone marrow canal with a solution of silicon powder preparation at the rate of 0.1-0.15 mg in 100-150 ml of distilled water, followed by application of a compression dressing for 15-20 min.

ADVANTAGE - More effective and reliable results. Bul 31/23.8.93  
Dwg.0/0

L164 ANSWER 4 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 95-068421 [10] WPIDS

DOC. NO. CPI: C95-030185

TITLE: New bi-specific antibodies for lysis of tumour cells - comprising a binding site of an epitope of a tumour cell and a binding site of an epitope of antigen CD2.

DERWENT CLASS: B04 D16

INVENTOR(S): JAEGGLE, C; MEUER, S; SCHRAVEN, B; STRITTMATTER, W; WILD, M; BURKHART, S; SHRAVEN, B; JAGGLE, C; MAUER, S

PATENT ASSIGNEE(S): (MERE) MERCK PATENT GMBH

COUNTRY COUNT: 25

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 637593	A1	950208	(9510)*	EN	20
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
NO 9402850	A	950203	(9513)		
AU 9468698	A	950209	(9514)		
CZ 9401802	A3	950215	(9515)		
CA 2129183	A	950203	(9517)		
JP 07089873	A	950404	(9522)		12
ZA 9405753	A	950531	(9528)		33
SK 9400912	A3	961106	(9702)		
HU 71309	T	951128	(9734)		
AU 683659	B	971120	(9804)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
-----			

EP 637593	A1	EP 94-111346	940721
NO 9402850	A	NO 94-2850	940801
AU 9468698	A	AU 94-68698	940726
CZ 9401802	A3	CZ 94-1802	940726
CA 2129183	A	CA 94-2129183	940729
JP 07089873	A	JP 94-181568	940802
ZA 9405753	A	ZA 94-5753	940802
SK 9400912	A3	SK 94-912	940728
HU 71309	T	HU 94-2220	940728
AU 683659	B	AU 94-68698	940726

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 683659	B Previous Publ.	AU 9468698

PRIORITY APPLN. INFO: EP 93-112330 930802

AN 95-068421 [10] WPIDS

AB EP 637593 A UPAB: 950314

The following are claimed: (A) a bispecific molecule useful for the lysis of tumour cells comprising a first binding site to an epitope of a tumour cell and a second binding site to an epitope of antigen CD2, having the designation BAb<X, AICD2.M1>Y or BAb<X, AICD2.M2>Y where BAb = bispecific antibody; X = an antibody determinant recognising a tumour antigen; AICD2.M1, AICD2.M2 = antibodies recognising antigen CD2; and Y = part of a whole antibody; (B) preparing a bispecific antibody (Fab')<sub>2</sub> fragment useful for lysis of tumour cells comprising a first binding site to an epitope of a tumour cell and a second binding site to an epitope of antigen CD2, by: (a) enzymatic conversion of 2 different monoclonal antibodies (Mabs), each comprising 2 identical L (light chain)-H (heavy chain) half molecules and linked by 1 disulphide bonds into 2 F(ab')<sub>2</sub> molecules; (b) splitting each F(ab')<sub>2</sub> molecule under reducing conditions into the Fab' thiols; (c) derivatising one of these Fab' molecules of each ab with a thiol activating agent; and (d) combining an activated Fab' molecule bearing tumour specificity with 1 non-activated Fab' molecule bearing leukocyte specificity or vice versa to obtain the desired bispecific antibody F(ab')<sub>2</sub> fragment, characterised in that MABs AICD2.M1 and AICD2.M2 are used as antibodies recognising leukocyte antigen; (C) Mab AICD2.M1 recognising antigen CD2 obtainable by isolation from the cell line 1 H 10 deposited as DSM ACC2118; and (D) Mab AICD2.M2 recognising antigen CD2 obtainable by isolation from the cell line 7 D 3 deposited as DSM ACC2119.

USE - The bispecific ab fragments can be used for preparing a drug for the treatment of human tumours. The kits can be used for purging of tumour cells ex vivo in autologous bone marrow transplantation, where the cells are treated with a formulation comprising 1 bispecific antibody associated with 1 carrier excipient or diluent (all claimed). The prods. can

also be used in diagnostics. The bispecific antibody fragments can be used parenterally at e.g. 0.1-200, pref. 0.1-100 mg/kg/dose.

ADVANTAGE - The new bispecific antibodies have the following favourable properties: strong avidity to tumour cells, strong avidity to T cells and NK cells, non-competitive against LFA3, no synergism with LFA3, no receptor modulation, high NK- and T-cell specificity and effectiveness only via a 2-step mechanism, which means that 1 bispecific antibody as such has no or only a marginal influence on T cell activation and tumour cell lysis.  
Dwg.0/7

L164 ANSWER 5 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 91-208167 [28] WPIDS  
 CROSS REFERENCE: 89-138884 [19]  
 DOC. NO. CPI: C91-090329  
 TITLE: Magnetically responsive fluorescent polymer particles - use for coupling to biological materials for assays, DNA-RNA probes etc..  
 DERWENT CLASS: A96 B04 D16 P41 P73  
 INVENTOR(S): SHAH, D O; WANG, C J; WANG, C H J; SHAH, D Q  
 PATENT ASSIGNEE(S): (BAXT) BAXTER DIAGNOSTICS INC; (DADE-N) DADE INT INC  
 COUNTRY COUNT: 18  
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9109141	A	910627	(9128)*		
RW: AT BE CH DE DK ES FR GB GR IT LU NL SE					
W: AU CA JP					
AU 9171746	A	910718	(9142)		
EP 463144	A	920102	(9202)		
R: AT BE CH DE GR IT LI LU NL SE					
JP 04503968	W	920716	(9235)		44
AU 634631	B	930225	(9315)		
US 5283079	A	940201	(9406)		14
US 5395688	A	950307	(9515)		13
EP 463144	A4	921209	(9524)		
EP 463144	B1	970205	(9711)	EN	21
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
JP 2589618	B2	970312	(9715)		14
JP 09028397	A	970204	(9715)		14
DE 69029908	E	970320	(9717)		
ES 2099156	T3	970516	(9727)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 463144	A	EP 91-902535	901212
JP 04503968	W	WO 90-US7369	901212

AU 634631	B		JP 91-502801	901212
US 5283079	A	Div ex	AU 91-71746	901212
		CIP of	US 87-113294	871026
			US 89-337511	890530
US 5395688	A	CIP of	US 89-452099	891214
		Cont of	US 87-113294	871026
			US 89-451483	891214
			US 93-114299	930830
EP 463144	A4		EP 91-902535	
EP 463144	B1		WO 90-US7369	901212
			EP 91-902535	901212
JP 2589618	B2		WO 90-US7369	901212
			JP 91-502801	901212
JP 09028397	A		JP 96-165311	960604
DE 69029908	E		DE 90-629908	901212
			WO 90-US7369	901212
			EP 91-902535	901212
ES 2099156	T3		EP 91-902535	901212

FILING DETAILS:

PATENT NO	KIND		PATENT NO
JP 04503968	W	Based on	WO 9109141
AU 634631	B	Previous Publ.	AU 9171746
		Based on	WO 9109141
US 5283079	A	CIP of	US 5091206
EP 463144	B1	Based on	WO 9109141
JP 2589618	B2	Previous Publ.	JP 04503968
		Based on	WO 9109141
DE 69029908	E	Based on	EP 463144
		Based on	WO 9109141
ES 2099156	T3	Based on	EP 463144

PRIORITY APPLN. INFO: US 89-452099 891214; US 89-451274 891214; US  
 89-451483 891214; US 89-451494 891214; US  
 87-113294 871026; US 89-337511 890530; US  
 93-114299 930830

AN 91-208167 [28] WPIDS  
 CR 89-138884 [19]  
 AB WO 9109141 A UPAB: 970417

Monodispersed fluorescent magnetic particles (FMP), of uniform size distribution and magnetic content, comprising the following, are new; (1) an inner fluorescent core polymer particle able to adsorb a monomer; and a magnetically responsive metal oxide and polymer (MOP) combination, the latter polymer composed from monomers able to adsorb to the inner core polymer particle; (b) the MOP evenly coating the inner core; and (c) particles of uniform size distribution, uniform magnetic content, and monodispersed in soln.

USE/ADVANTAGE - The FMP can be used as solid phase for enzyme

immunoassay, fluorescence immunoassay, radioimmunoassay, DNA/RNA hybridisation assay, and other diagnostic applications. These assays can be used to measure a wide variety of e.g. drugs, hormones, antibodies, peptides, DNA, RNA, nucleotides, viral antigens, and carbohydrates, in biological samples. They can also be used for affinity purification, cell sepn. (e.g. in bone

marrow purging, to remove cancer cells), enzyme

immobilisation and other biomedical applications. In enzyme immobilisation, the particles replace other solid phases, e.g. glass beads. @ (44pp Dwg.No.0/3)GE

ABEQ US 5283079 A UPAB: 940322

Monodispersed fluorescent magnetic particles of uniform size distribution are made by evenly coating a fluorescent core polymer particle with magnetically-responsive metal oxide and polymer contg. monomers able to absorb the inner core particle.

Fluorescent core polymer particle comprises opt. crosslinked polystyrene, incorporated with fluorescent dye, and has particle size 1-100 microns.

Metal oxide is super-paramagnetic, paramagnetic, or ferromagnetic.

USE/ADVANTAGE - For passive or covalent coupling of antigens, antibodies, enzymes or DNA/RNA hybridisation, or as solid phase for various immunoassays, DNA/RNA hybridisation probes assays, affinity purificn., cell sepn., etc. A wide variety of monomers can be used for the final coating to provide different surface characteristics of the polymer product.

Dwg.0/3

ABEQ US 5395688 A UPAB: 950425

Monodispersed fluorescent magnetic 1-100 micron particles with uniform size distribution and magnetic content comprise an inner fluorescent core polymer particle able to absorb a monomer and a coating evenly covering it comprising 1 micron or less magnetic metal oxide particles of supermagnetic, paramagnetic or ferromagnetic metal oxide particles, and a polymer, which is prepd. from monomers adsorbable by the inner fluorescent core polymer particle. (Fig.2). Pref. the inner core polymer particle is polystyrene with a fluorescent dye incorporated, and magnetic metal oxide particles are formed from transition metal salts. The polymer contains COO, NH<sub>2</sub> or OH functional gps. opt. coupled to a biologic material. The particle may be coated with a 2nd, polymer contg. the same functional gps. opt. coupled to biological material.

USE - For biological techniques involving sepn. of bound from free fractions esp. immunoassays, affinity purificn., passive or covalent coupling of biological material, e.g. antigens, antibodies, enzymes or DNA/RNA, cell sepn., phagocytosis, etc.

Dwg.0/3

ABEQ EP 463144 B UPAB: 970313

A process to determine the presence or concentration of an analyte comprising (a) contacting fluorescent magnetic particles having a ligand specific for said analyte attached to said fluorescent magnetic particle with fluid specimen to form a suspension; (b)

incubating said suspension until sufficient analyte has reacted with said specific ligand; (c) separating said magnetic particles from said suspension; (d) adding a second labelled ligand specific for said analyte to said separated magnetic particles; (e) incubating said suspension until sufficient analyte has reacted with said second labelled ligand specific for said analyte; (f) separating said magnetic particles from said suspension (g) detecting or measuring duplex formation on said magnetic particles by means of said label; and (h) relating the amount of labelled ligand measured with the amount of analyte measured for a control sample, wherein said fluorescent magnetic particles are used to monitor the number of particles present during said process.  
Dwg.0/3B

L164 ANSWER 6 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
ACCESSION NUMBER: 82-11316E [06] WPIDS  
TITLE: Treatment of osteomyelitis in intramedullary  
osteosynthesis - involves irrigating  
bone marrow canal with iodoform  
soln. and vacuum draining.  
DERWENT CLASS: A96 B05 P31  
INVENTOR(S): BASKEVICH, M Y A; KAZAKOV, G M  
PATENT ASSIGNEE(S): (TYUM-R) TYUMEN MEDICINE INS  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 825018	B	810505	(8206)*		3

PRIORITY APPLN. INFO: SU 77-2461651 770301  
AN 82-11316E [06] WPIDS  
AB SU 825018 B UPAB: 930915

Treatment of osteomyelitis arising in intramedullary osteosynthesis involves general antibacterial therapy, irrigation of the bone marrow canal with a soln. of an antibacterial prepn. and vacuum draining, followed by the removal of the nail used to fix the bone fragments and then the performance of osteosynthesis outside the seat of the pathological condition.

To increase the effectiveness of treatment, the antibacterial preparation used to irrigate the bone marrow canal should be a soln. of iodoform. Also in the osteosynthesis outside the seat of injection, the bone marrow canal is irrigated

additionally and vacuum draining performed. Defects in the soft tissues are sealed using waterproof film such as polyethylene to which a 5 per cent tincture of iodine has been applied.

Simultaneously, with the local treatment of the affected zone,

general strengthening treatment, desensitising and immunotherapy are given, as is perorally and parenterally directed antibiotic therapy. Bul.16/30.4.81.

=> file biosis

FILE 'BIOSIS' ENTERED AT 12:04:32 ON 27 MAR 1998  
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FILE COVERS 1969 TO DATE.  
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT  
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 20 March 1998 (980320/ED)  
CAS REGISTRY NUMBERS (R) LAST ADDED: 20 March 1998 (980320/UP)

=> d l165 1-8 all

L165 ANSWER 1 OF 8 BIOSIS COPYRIGHT 1998 BIOSIS

AN 96:126311 BIOSIS

DN 98698446

TI Tumor cell dissemination in bone marrow and peritoneal lavage. An immunocytochemical study in patients with gastric and colorectal carcinomas.

AU Broll R; Lembcke K; Stock C; Zingler M; Duchrow M; Schimmelpenning H; Strik M; Mueller G; Kujath P; Bruch H-P

CS Klin. Chir., Chir. Forsch., Med. Univ. Luebeck, Ratzeburger Allee 160, D-23538 Luebeck, Germany

SO Langenbecks Archiv fuer Chirurgie 381 (1). 1996. 51-58. ISSN: 0023-8236

LA German

PR Biological Abstracts Vol. 101 Iss. 007 Ref. 098727

AB The tumor spread and the radicality of surgical resection are the most important facts in a patient's prognosis. In spite of curative tumor resection many patients die from metastases or local tumor recurrence. One possible reason is early dissemination of tumor cells which cannot be detected with clinical methods of examination. For this reason the aim of our study was to examine both bone marrow and peritoneal lavage for disseminated tumor cells with an immunocytochemical technique in patients with a gastrointestinal carcinoma. We also wanted to find out whether there was any correlation between the incidence of tumor cell detection and the TNM classification, staging and tumor grading and whether disseminated tumor cells have any prognostic significance. Our study included 54 patients who underwent surgery in our clinic for a carcinoma of the stomach (20 patients) or the colorectum (34 patients) from November 1993 to December 1994. At the beginning of the operation bone marrow had been taken from the iliac spine, and the abdomen was irrigated with 1000 ml saline solution immediately after laparotomy or laparoscopy. After cell separation with Ficoll density centrifugation 5 times 10<sup>5</sup> cells were applied

per slide by a cytopspin technique. For detection of the tumor cells we used the APAAP technique and the following monoclonal antibodies: KL1, CK2, anti-CEA, 17-1A (bone marrow) and Ber-EP4, B72.3, anti-CEA and 17-1A (peritoneal lavage). Altogether 77% of all patients had tumor cells in the bone marrow and 69% in peritoneal lavage fluid. It was possible to detect tumor cells in bone marrow (67%) and peritoneal lavage fluid (25%) even of patients with T1 tumors. The percentage increased with depth of wall infiltration. There was a marked difference in bone marrow aspirates between patients with lymph-node-negative tumors (N0) and those with lymph-node-positive tumors 65% had tumor cells in N0 and 85% in N+ stages. This trend was also seen in patients with (M1) and without (M0) metastases, in both bone marrow aspirates and peritoneal lavage fluid. In bone marrow there was a good correlation of tumor cells with staging, but in peritoneal lavage fluid this was not so. Finally, we detected tumor cells more often in bone marrow and peritoneal lavage fluid of patients with poorly differentiated tumors (G3) or diffuse Lauren type than in patients with moderately differentiated tumors (G2) or intestinal Lauren type. After a median follow-up period of 12.5 months patients with disseminated tumor cells had a lower survival rate than patients without tumor cells.

- ST RESEARCH ARTICLE; HUMAN; LYMPH NODE METASTASES; PROGNOSIS; SURGICAL RESECTION
- CC Microscopy Techniques-Cytology and Cytochemistry 01054  
 Anatomy and Histology, General and Comparative-Surgery \*11105  
 Chordate Body Regions-Abdomen 11314  
 Pathology, General and Miscellaneous-Therapy 12512  
 Digestive System-Pathology \*14006  
 Blood, Blood-Forming Organs and Body Fluids-Blood, Lymphatic and Reticuloendothelial Pathologies \*15006  
 Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and Reticuloendothelial System \*15008  
 Coelomic Membranes; Mesenteries and Related Structures 18200  
 Neoplasms and Neoplastic Agents-Immunology \*24003  
 Neoplasms and Neoplastic Agents-Pathology; Clinical Aspects; Systemic Effects \*24004  
 Neoplasms and Neoplastic Agents-Therapeutic Agents; Therapy \*24008  
 Immunology and Immunochemistry-General; Methods 34502
- BC Hominidae 86215
- L165 ANSWER 2 OF 8 BIOSIS COPYRIGHT 1998 BIOSIS
- AN 96:118465 BIOSIS
- DN 98690600
- TI Phototoxicity of some bromine-substituted rhodamine dyes: Synthesis, photophysical properties and application as photosensitizers.
- AU Pal P; Zeng H; Durocher G; Girard D; Li T; Gupta A K; Giasson R; Blanchard L; Gaboury L; Balassy A; Turmel C; Laperriere A; Villeneuve L
- CS Lab. Photophysique Mol., Dep. de Chimie, Univ. Montreal, C. P. 6128, Succ. Centre-ville, Montreal, PQ H3C 3J7, Canada
- SO Photochemistry and Photobiology 63 (2). 1996. 161-168. ISSN:



0031-8655  
 LA English  
 PR Biological Abstracts Vol. 101 Iss. 007 Ref. 090881  
 AB The synthesis of some bromine-substituted rhodamine derivatives viz., 4,5-dibromorhodamine methyl ester (dye 2) and 4,5-dibromorhodamine n-butyl ester (dye 3) are reported. These dyes were synthesized to promote a more efficient cancer cell photosensitizer for potential use in in vitro bone marrow purging in preparation for autologous bone marrow transplantation. Spectroscopic and photophysical characterization of these dyes together with rhodamine 123 (dye 1) are reported in water, methanol, ethanol and also in a microheterogeneous system, sodium dodecyl sulfate. The possible mechanism of photosensitization is characterized in terms of singlet oxygen efficiency of these dyes. Singlet oxygen quantum yields for bromine-substituted dyes are in the range of 0.3-0.5 depending on the solvent. For dye 1 no singlet oxygen production is found. The photodynamic actions of these dyes in different cell lines are tested. It was found that dye 2 and dye 3 are efficient photosensitizers and mediate eradication of K562, EM2, myeloid cell lines (CML) and the SMF-AI rhabdomyosarcoma line.  
 ST RESEARCH ARTICLE; HUMAN; 4,5-DIBROMORHODAMINE METHYL ESTER; 4,5-DIBROMORHODAMINE N-BUTYL ESTER; REACTIVE OXYGEN SPECIES; RHABDOMYOSARCOMA; MYELOID LEUKEMIA; BONE MARROW PURGING; TRANSPLANTATION; PHOTODYNAMIC THERAPY  
 RN 7726-95-6 (BROMINE)  
 7782-44-7 (OXYGEN)  
 CC Radiation-Radiation and Isotope Techniques \*06504  
 Biochemistry-Gases \*10012  
 Biochemical Studies-General 10060  
 Biochemical Studies-Minerals 10069  
 External Effects-Light and Darkness \*10604  
 Anatomy and Histology, General and Comparative-Regeneration and Transplantation \*11107  
 Pathology, General and Miscellaneous-Therapy 12512  
 Blood, Blood-Forming Organs and Body Fluids-Blood, Lymphatic and Reticuloendothelial Pathologies \*15006  
 Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and Reticuloendothelial System \*15008  
 Muscle-Pathology \*17506  
 Neoplasms and Neoplastic Agents-Therapeutic Agents; Therapy \*24008  
 Neoplasms and Neoplastic Agents-Blood and Reticuloendothelial Neoplasms \*24010  
 BC Hominidae 86215  
 L165 ANSWER 3 OF 8 BIOSIS COPYRIGHT 1998 BIOSIS  
 AN 95:28928 BIOSIS  
 DN 98043228  
 TI Successful treatment of hemorrhagic cystitis secondary to cyclophosphamide chemotherapy with intravesical instillation of prostaglandin F-2alpha.  
 AU Yamamoto M; Hibi H; Ohmura M; Miyake K

CS Dep. Urol., Nagoya Univ. Sch. Med., Nagoya, Japan  
 SO Acta Urologica Japonica 40 (9). 1994. 833-835. ISSN: 0018-1994  
 LA English  
 PR Biological Abstracts Vol. 099 Iss. 002 Ref. 027772  
 AB The treatment of cyclophosphamide-induced hemorrhagic cystitis is difficult. We report a successful case of severe cyclophosphamide-induced hemorrhagic cystitis treated with intravesical instillation of prostaglandin F-2alpha. A 32-year-old woman underwent high-dose cyclophosphamide conditioning before the autologous bone marrow transplantation. She developed clot retention which required continuous irrigation with normal saline. The patient had failed to respond to continuous bladder irrigation with saline and intravesical administration of 1% alum. Fifty ml of prostaglandin F-2alpha solution (1 mg in 100 ml normal saline) was instilled into the bladder, with a dwelling time of 60 minutes, three times a day for 5 days. The hematuria cleared completely 3 days after therapy. The only adverse effect was bladder spasm which was controlled with oxybutynin chloride. The success of this therapy suggests that prostaglandin F-2alpha is a safe and useful therapy for hemorrhagic cystitis secondary to cyclophosphamide chemotherapy.

ST CASE STUDY; HUMAN; CYCLOPHOSPHAMIDE; IMMUNOSUPPRESSANT AGENT;  
 PROSTAGLANDIN F2-ALPHA; HORMONE-DRUG; CLOT RETENTION; HEMATURIA

RN 50-18-0 (CYCLOPHOSPHAMIDE)  
 551-11-1 (PROSTAGLANDIN F-2ALPHA)

CC Biochemical Studies-General 10060  
 Biochemical Studies-Lipids 10066  
 Pathology, General and Miscellaneous-Inflammation and Inflammatory Disease \*12508  
 Pathology, General and Miscellaneous-Therapy \*12512  
 Cardiovascular System-Blood Vessel Pathology \*14508  
 Blood, Blood-Forming Organs and Body Fluids-Blood, Lymphatic and Reticuloendothelial Pathologies \*15006  
 Urinary System and External Secretions-General; Methods \*15501  
 Urinary System and External Secretions-Pathology \*15506  
 Endocrine System-General \*17002  
 Pharmacology-Clinical Pharmacology \*22005  
 Pharmacology-Cardiovascular System \*22010  
 Pharmacology-Endocrine System \*22016  
 Pharmacology-Immunological Processes and Allergy \*22018  
 Pharmacology-Urinary System \*22032  
 Routes of Immunization, Infection and Therapy \*22100  
 Toxicology-Pharmacological Toxicology \*22504  
 Immunology and Immunochemistry-Immunopathology, Tissue Immunology \*34508

BC Hominidae 86215

L165 ANSWER 4 OF 8 BIOSIS COPYRIGHT 1998 BIOSIS  
 AN 93:300712 BIOSIS  
 DN BA96:18937  
 TI TREATMENT OF CYCLOPHOSPHAMIDE-INDUCED HEMORRHAGIC CYSTITIS WITH

**INTRAVESICAL CARBOPROST TROMETHAMINE.**

AU LEVINE L A; JARRARD D F  
 CS DEP. UROL., RUSH-PRESBYTERIAN-ST. LUKE'S MED. CENT., 1653 W. CONGRESS  
 PARKWAY, CHICAGO, IL 60612-3864, USA.  
 SO J UROL 149 (4). 1993. 719-723. CODEN: JOURAA ISSN: 0022-5347  
 LA English  
 AB We review our experience with 18 consecutive patients who received  
 intravesical carboprost tromethamine, an F2-.alpha. prostaglandin,  
 for severe hemorrhagic systitis following cyclophosphamide  
 chemotherapy. Of the patients 16 were given cyclophosphamide for  
 conditioning before **bone marrow**  
**transplantation** and 2 received the drug as cytotoxic therapy  
 alone (dose range 3.6 to 15.8 gm.). All patients had severe gross  
 hematuria that was refractory to forced diuresis and to continuous  
 saline bladder **irrigation**. The intravesical prostaglandin  
 therapy was initiated only after significant transfusion requirements  
 (greater than 1 unit packed red blood cells per day) and/or numerous  
 catheter manipulations for relief of clot retention. Eligible  
 patients underwent complete clot **evacuation** followed by  
 intravesical instillation of 0.4 to 1.0 mg. % carboprost tromethamine  
 for 2 hours 4 times per day, alternating with continuous saline  
 bladder **irrigation** for 2 hours. Six patients attempted an  
 alternate protocol of 0.8 to 1.0 mg. % carboprost tromethamine given  
 by continous saline bladder **irrigation**. Complete resolution  
 of gross hematuria occurred in 9 patients (50%). Eight patients had a  
 partial response, with decreased transfusion requirements noted.  
 However, complete resolution ultimately required an alternative  
 therapy (for example formalin or urinary diversion). One patient (6%)  
 failed to respond and required formalin therapy on day 4 of  
 carboprost tromethamine therapy. Decreased red blood cell  
 transfusion requirements were noted during and after therapy when  
 compared to pretreatment values. No changes in renal or bladder  
 function were noted during the mean followup of 17 weeks (range 1 to  
 64 weeks). There were 3 cases of recurrent hematuria. Side effects  
 were limited to bladder spasm in 14 of the 18 patients (78%), with no  
 systemic complications. The results suggest that carboprost  
 tromethamine is a useful beside therapy for hemorrhagic cystitis due  
 to cyclophosphamide, and treatment appears to have minimal toxicity.

ST HUMAN CARBOPROST TROMETHAMINE ANTINEOPLASTIC-DRUG TOXICITY BLADDER  
 NEOPLASM **BONE MARROW TRANSPLANTATION**  
 RN 50-18-0 (CYCLOPHOSPHAMIDE)  
 58551-69-2 (CARBOPROST TROMETHAMINE)  
 CC Biochemical Studies-General 10060  
 Anatomy and Histology, General and Comparative-Surgery \*11105  
 Anatomy and Histology, General and Comparative-Regeneration and  
 Transplantation \*11107  
 Pathology, General and Miscellaneous-Therapy 12512  
 Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and  
 Reticuloendothelial System \*15008  
 Urinary System and External Secretions-Pathology \*15506  
 Toxicology-Pharmacological Toxicology \*22504

Neoplasms and Neoplastic Agents-Therapeutic Agents; Therapy \*24008  
 BC Hominidae 86215

L165 ANSWER 5 OF 8 BIOSIS COPYRIGHT 1998 BIOSIS  
 AN 92:457081 BIOSIS  
 DN BA94:98481  
 TI PYRENE BUTANOL AN EFFICIENT SELECTIVE AND NON-METABOLIZED  
 PHOTSENSITIZING AGENT FOR HUMAN MYELOID LEUKEMIA CELLS.  
 AU FIBACH E; RABIA S A; GATT S  
 CS DEP. HEMATOL., HADASSAH UNIV. HOSP., P.O. BOX 12000, JERUSALEM 91120,  
 ISRAEL.  
 SO LEUK RES 16 (5). 1992. 453-462. CODEN: LEREDD ISSN: 0145-2126  
 LA English  
 AB Methods for ex vivo purging of neoplastic cells from harvested marrow  
 are being developed to increase the efficacy of autologous  
 transplantation. One approach is selective photosensitization, using  
 sensitizing compounds and light radiation. Pyrene-containing fatty  
 acids and lipids are potent photosensitizers e.g.  
 12-(1-pyrene)dodecanoic acid (P12), is taken up preferentially by  
 leukemic cells and undergo photoexcitation when exposed to long wave  
 ultra-violet light, resulting in selective killing of leukemic  
 cells. These compounds are incorporated into the neutral- and  
 phospho-lipids of the cells. The presence of intracellular  
 pyrene-linked lipids might present a potential hazard in applying  
 these agents for clinical use. We have, therefore, studied a series  
 of other pyrene-linked compounds with the objective of finding a  
 non-metabolizable photosensitizing agent that can be easily removed  
 from the cells. In the present paper we report the results with  
 pyrene butanol (P4-OH), a pyrene linked short-chain alcohol. When  
 compared to P12, P4-OH was found to be taken up by cells most rapidly  
 and reached saturation within minutes. It did not undergo any  
 metabolism and washing the cells with serum-containing salt  
 solutions removed practically all the P4-OH. This compound  
 was found to be an efficient photosensitizer (in terms of  
 concentrations and time of incubation with the cells) and selective  
 to leukemic cells - it caused a 99% reduction in leukemic clonogenic  
 cells under conditions that normal hemopoietic progenitors remained  
 almost intact. These properties make P4-OH a potential  
 photosensitizer for clinical application.

ST RADIOSENSITIZER-DRUG LIPID AUTOLOGOUS BONE MARROW  
 TRANSPLANTATION PURGING THERAPY

CC Radiation-Radiation and Isotope Techniques \*06504  
 Biochemical Studies-General 10060  
 Biochemical Studies-Lipids 10066  
 Anatomy and Histology, General and Comparative-Regeneration and  
 Transplantation \*11107  
 Pathology, General and Miscellaneous-Therapy 12512  
 Blood, Blood-Forming Organs and Body Fluids-General; Methods \*15001  
 Blood, Blood-Forming Organs and Body Fluids-Blood, Lymphatic and  
 Reticuloendothelial Pathologies \*15006  
 Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and

Reticuloendothelial System \*15008  
 Pharmacology-Clinical Pharmacology \*22005  
 Pharmacology-Blood and Hematopoietic Agents \*22008  
 Neoplasms and Neoplastic Agents-Therapeutic Agents; Therapy \*24008  
 Neoplasms and Neoplastic Agents-Blood and Reticuloendothelial  
 Neoplasms \*24010  
 BC Hominidae 86215

L165 ANSWER 6 OF 8 BIOSIS COPYRIGHT 1998 BIOSIS

AN 91:365168 BIOSIS

TI HEMATOPOIESIS ON SUSPENDED NYLON SCREEN-STROMAL CELL  
 MICROENVIRONMENTS.

AU NAUGHTON B A; TJOTA A; SIBANDA B; NAUGHTON G K

CS MED. LAB., SCI. DEP., HUNTER COLL. SCH. HEALTH SCI., NEW YORK, N.Y.

SO J BIOMECH ENG 113 (2). 1991. 171-177. CODEN: JBENDY ISSN: 0148-0731

LA English

AB A three-dimensional culture system for the growth of primate and rodent bone marrow was developed in our laboratory. This method involves the seeding of stromal cells onto a nylon screen and the inoculation of fresh or cryopreserved bone marrow hematopoietic cells after stromal cell processes had extended across 3 to 4 out of every 5 mesh openings. Stromal cells attach, grow, and secrete matrix proteins which contribute to an intricate microenvironment for the support of multilineage hematopoiesis, which was observed for >270 days in the rat model and for >12 weeks in the human system, as evidence by flow cytometry analysis and in vitro clonogenic assays. The adherent zones of these suspended nylon screen cultures consisted primarily of immature cells. These cultures could also be used as substrates for cytotoxicity measurements; treatment of rat bone marrow cultures of various ages with cytosine .beta.-D arabinofuranoside, cyclophosphamide, 5-fluorouracil, or methotrexate resulted in a dose-dependent decrease in CFU-C numbers and latered the phenotypic distribution of hematologic cells in the adherent zone. The use of a modification of this method to generate large numbers of active cytolytic cells after > 75 days culture of rat bone marrow-derived natural killer is described also. Suspended nylon screen bone marrow culture also has potential uses in genetic insertion and graft vs. host disease studies, blood component therapy, the evaluation of ex vivo purging programs, and in marrow expansion for transplantation.

ST RAT PRIMATE BONE MARROW TRANSPLANTATION

CC Cytology and Cytochemistry-Animal \*02506

Biochemical Studies-General 10060

Biophysics-Bioengineering \*10511

Anatomy and Histology, General and Comparative-Regeneration and Transplantation \*11107

Blood, Blood-Forming Organs and Body Fluids-Blood Cell Studies \*15004

Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and Reticuloendothelial System \*15008

Immunology and Immunochemistry-Immunopathology, Tissue Immunology

\*34508

BC Primates-Unspecified 86190  
Muridae 86375

L165 ANSWER 7 OF 8 BIOSIS COPYRIGHT 1998 BIOSIS

AN 90:90740 BIOSIS

DN BA89:50091

TI LECTIN-BINDING PROPERTIES OF BURKITT'S LYMPHOMA CELL LINES  
APPLICATION TO BONE MARROW PURGING.

AU MUMCUOGLU M; FAVROT M; SLAVIN S

CS DEP. BONE MARROW TRANSPL., HADASSAH UNIV. HOSP., JERUSALEM, ISRAEL.

SO EXP HEMATOL (N Y) 18 (1). 1990. 55-60. CODEN: EXHMA6 ISSN: 0301-472X

LA English

AB The efficacy of binding of several lectins to different Burkitt's lymphoma (BL) cell lines was investigated. Soybean agglutinin (SBA), peanut agglutinin (PNA), wheat germ agglutinin (WGA), and Sambucus nigra agglutinin (SNA) bound strongly to all BL cell lines. Because SBA has been used safely in clinical bone marrow transplantation (BMT) as part of the procedure for T-cell depletion and hence does not bind to the stem cells, we chose this lectin to establish a model for purging BL cells from human bone marrow. Using a two-step purging procedure with tumor cell agglutination by SBA in solution, a 2-log depletion could be accomplished. Using SBA-coated magnetic beads, we could improve BL cell depletion to > 4 logs. Because SBA seems to have a broad specificity for BL cells with concomitant enrichment in hematopoietic progenitor cells, the use of SBA-coated magnetic beads could be of interest for autologous BMT for lymphomas as well as other hematological malignancies and solid tumors with positive binding to SBA.

ST SAMBUCUS-NIGRA HUMAN PEANUT AGGLUTININ SOYBEAN AGGLUTININ WHEAT GERM AGGLUTININ

CC Biochemical Studies-Carbohydrates 10068

Metabolism-Carbohydrates 13004

Blood, Blood-Forming Organs and Body Fluids-General; Methods 15001

Blood, Blood-Forming Organs and Body Fluids-Blood Cell Studies

\*15004

Blood, Blood-Forming Organs and Body Fluids-Blood, Lymphatic and Reticuloendothelial Pathologies \*15006

Neoplasms and Neoplastic Agents-Neoplastic Cell Lines \*24005

Neoplasms and Neoplastic Agents-Carcinogens and Carcinogenesis \*24007

Neoplasms and Neoplastic Agents-Blood and Reticuloendothelial Neoplasms \*24010

Virology-Animal Host Viruses \*33506

Medical and Clinical Microbiology-Virology \*36006

BC Herpetoviridae and/or Herpesviridae 02220

Gramineae 25305

Caprifoliaceae 25745

Leguminosae 26260

Hominidae 86215

L165 ANSWER 8 OF 8 BIOSIS COPYRIGHT 1998 BIOSIS

AN 89:359913 BIOSIS

DN BA88:52027

TI CONTINUOUS INFUSION OF COMPLEMENT BY AN AUTOMATED CELL PROCESSOR  
ENHANCES CYTOTOXICITY OF MONOCLONAL ANTIBODY SENSITIZED LEUKEMIA  
CELLS.

AU HOWELL A L; FOGG-LEACH M; DAVIS B H; BALL E D

CS DEP. MICROBIOL., DARTMOUTH MED. SCH., HANOVER, N.H. 03756, USA.

SO BONE MARROW TRANSPLANT 4 (3). 1989. 317-322. CODEN: BMTRE9

LA English

AB We report the use of the Haemonetics cell processor for monoclonal  
antibody (MoAb) and complement (C')-mediated lysis of leukemia cells.  
Using the HL-60 promyelocytic leukemia cell line, we can achieve a  
six-log depletion of HL-60 colony-forming cells in cell mixtures  
containing 1% HL-60 cells and 99% normal peripheral blood or bone  
marrow leukocytes at 107/ml after a single 60-min treatment with an  
anti-myeloid MoAb, PM-81, plus C'. In this procedure, we continuously  
infuse a solution of fresh C' while removing medium  
containing spent C'. We have utilized this procedure to purge  
remission bone marrow from patients with acute  
myelogenous leukemia in preparation for autologous bone  
marrow transplantation. There were no adverse effects to  
normal progenitor cells of the granulocyte, monocyte and erythrocyte  
lineages as measured in colony-forming assays. Other potential  
benefits of using the cell processor method of cytotoxicity include  
reduction in treatment time and the amounts of costly reagents.

ST HUMAN CELL LYSIS AUTOLOGOUS BONE MARROW TRANSPLANTATION

CC Cytology and Cytochemistry-Human \*02508

Biochemical Studies-Proteins, Peptides and Amino Acids 10064

Enzymes-General and Comparative Studies; Coenzymes \*10802

Anatomy and Histology, General and Comparative-Regeneration and  
Transplantation \*11107

Pathology, General and Miscellaneous-Therapy 12512

Blood, Blood-Forming Organs and Body Fluids-General; Methods 15001

Blood, Blood-Forming Organs and Body Fluids-Blood and Lymph Studies  
\*15002

Blood, Blood-Forming Organs and Body Fluids-Blood Cell Studies  
\*15004

Blood, Blood-Forming Organs and Body Fluids-Blood, Lymphatic and  
Reticuloendothelial Pathologies \*15006

Blood, Blood-Forming Organs and Body Fluids-Lymphatic Tissue and  
Reticuloendothelial System \*15008

Pharmacology-Blood and Hematopoietic Agents \*22008

Neoplasms and Neoplastic Agents-Pathology; Clinical Aspects; Systemic  
Effects \*24004

Neoplasms and Neoplastic Agents-Therapeutic Agents; Therapy \*24008

Neoplasms and Neoplastic Agents-Blood and Reticuloendothelial

Neoplasms \*24010

BC Hominidae 86215

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=> d 1167 1-6 ti so ab ct

L167 ANSWER 1 OF 6 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Intravesicular carboprost for the treatment of hemorrhagic cystitis after marrow transplantation.

SO Urology, (1995) 46/6 (811-815).

ISSN: 0090-4295 CODEN: URGYAZ

AB Objectives. To determine the minimal active dose and extent of activity of intravesicular carboprost for the treatment of hemorrhagic cystitis after marrow transplantation. Methods. Twenty-four adults with grade 3 or 4 hemorrhagic cystitis were treated. All but 2 had failed other local therapy. Treatment was initiated at a median of 32 days post-transplant. Eleven patients received carboprost intravesicularly at 0.2 mg/dL for 60 minutes every 6 hours, and the dose was escalated every 24 hours until a dose of 1.0 mg/dL was reached unless a response was achieved. Thirteen additional patients were treated at an initial dose of 0.8 mg/dL, with escalation to 1.0 mg/dL after four doses in the absence of a response. Results. Overall, 15 of the 24 patients responded. In the dose-escalation setting, 0.8 mg/dL was the minimal active dose. The total response rate was 62% with doses at or above 0.8 mg/dL and 18% at lower doses. All but one response occurred with 7 or fewer days of therapy, and 9 patients relapsed later. Four additional patients were salvaged following cystoscopy with clot evacuation with or without alum or formalin instillation. In all but 1 patient, bladder spasms developed during treatment with carboprost, but were not sufficiently severe to discontinue therapy. Conclusions. Intravesicular carboprost at 1.0 mg/dL every 6 hours for no more than 7 days should be considered for a randomized study for treatment of refractory hemorrhagic cystitis. Cystoscopic examination and evacuation of clots prior to therapy may be required to achieve the full benefit of this treatment.

CT EMTAGS: therapy (0160); diagnosis (0140); mammal (0738); human (0888); male (0041); female (0042); clinical article (0152); adult (0018); priority journal (0007); article (0060); adverse drug reaction (0198); iatrogenic disease (0300)

Medical Descriptors:

\*bone marrow transplantation

\*hemorrhagic cystitis: CO, complication

\*hemorrhagic cystitis: DT, drug therapy

dose response

cystoscopy



smooth muscle spasm: SI, side effect

bladder irrigation

treatment outcome

human

male

female

clinical article

clinical trial

phase 1 clinical trial

phase 2 clinical trial

adult

priority journal

article

Drug Descriptors:

\*carboprost: AE, adverse drug reaction

\*carboprost: CT, clinical trial

\*carboprost: DO, drug dose

\*carboprost: DT, drug therapy

aluminum potassium sulfate

formaldehyde

carboprost trometamol

L167 ANSWER 2 OF 6 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Determination of ascorbic acid by isotachopheresis with regard to its potential in neuroblastoma therapy.

SO J. CHROMATOGR., (1993) 638/2 (235-240).

ISSN: 0021-9673 CODEN: JOCRAM

AB Analytical capillary isotachopheresis was used to determine ascorbic acid (AA) in different matrices (cell-free system, neuroblastoma cell extracts and urine). The system for

purging bone marrow of neuroblastoma

cells, including 6-hydroxydopamine (6-OHDA) and AA, was analysed with regard to the interaction of AA with 6-OHDA and its autoxidation product, hydrogen peroxide. Furthermore, analyses concerning the uptake of AA into neuroblastoma cells as well as its excretion in urine after uptake of large amounts were carried out.

CT EMTAGS: therapy (0160); mammal (0738); human (0888); human tissue, cells or cell components (0111); priority journal (0007); conference paper (0061)

Medical Descriptors:

\*isotachopheresis

\*neuroblastoma: DT, drug therapy

\*gel electrophoresis

urine

human

human cell

priority journal

conference paper

Drug Descriptors:

\*ascorbic acid: AN, drug analysis

\*ascorbic acid: CR, drug concentration

L167 ANSWER 3 OF 6 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Treatment of cyclophosphamide-induced hemorrhagic cystitis with intravesical carboprost tromethamine.

SO J. UROL., (1993) 149/4 (719-723).

ISSN: 0022-5347 CODEN: JOURAA

AB We review our experience with 18 consecutive patients who received intravesical carboprost tromethamine, an F2-.alpha. prostaglandin, for severe hemorrhagic cystitis following cyclophosphamide chemotherapy. Of the patients 16 were given cyclophosphamide for conditioning before **bone marrow transplantation** and 2 received the drug as cytotoxic therapy alone (dose range 3.6 to 15.8 gm.). All patients had severe gross hematuria that was refractory to forced diuresis and to continuous saline bladder irrigation. The intravesical prostaglandin therapy was initiated only after significant transfusion requirements (greater than 1 unit packed red blood cells per day) and/or numerous catheter manipulations for relief of clot retention. Eligible patients underwent complete clot **evacuation** followed by intravesical instillation of 0.4 to 1.0 mg. % carboprost tromethamine for 2 hours 4 times per day, alternating with continuous saline bladder irrigation for 2 hours. Six patients attempted an alternate protocol of 0.8 to 1.0 mg. % carboprost tromethamine given by continuous saline bladder irrigation. Complete resolution of gross hematuria occurred in 9 patients (50%). Eight patients had a partial response, with decreased transfusion requirements noted. However, complete resolution ultimately required an alternative therapy (for example formalin or urinary diversion). One patient (6%) failed to respond and required formalin therapy on day 4 of carboprost tromethamine therapy. Decreased red blood cell transfusion requirements were noted during and after therapy when compared to pretreatment values. No changes in renal or bladder function were noted during the mean followup of 17 weeks (range 1 to 64 weeks). There were 3 cases of recurrent hematuria. Side effects were limited to bladder spasm in 14 of the 18 patients (78%), with no systemic complications. The results suggest that carboprost tromethamine is a useful beside therapy for hemorrhagic cystitis due to cyclophosphamide, and treatment appears to have minimal toxicity.

CT EMTAGS: therapy (0160); mammal (0738); human (0888); clinical article (0152); adolescent (0017); child (0022); school child (0016); adult (0018); priority journal (0007); article (0060); adverse drug reaction (0198); iatrogenic disease (0300)

Medical Descriptors:  
 \*hemorrhagic cystitis: DT, drug therapy  
 \*hemorrhagic cystitis: SI, side effect  
 cancer chemotherapy  
**bone marrow transplantation**  
 hematuria: SI, side effect  
 diuresis  
**bladder irrigation**

blood transfusion  
catheterization  
urinary diversion  
kidney function  
bladder function  
muscle spasm: SI, side effect  
bladder tumor: DT, drug therapy  
intravesical drug administration  
human  
clinical article  
adolescent  
child  
school child  
adult  
priority journal  
article

Drug Descriptors:

\*cyclophosphamide: AE, adverse drug reaction  
\*cyclophosphamide: DT, drug therapy  
\*carboprost trometamol: AE, adverse drug reaction  
\*carboprost trometamol: AD, drug administration  
\*carboprost trometamol: DT, drug therapy

L167 ANSWER 4 OF 6 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Hematopoiesis on suspended nylon screen-stromal cell  
microenvironments.

SO J. BIOMECH. ENG., (1991) 113/2 (171-177).  
ISSN: 0148-0731 CODEN: JBENDY

AB A three-dimensional culture system for the growth of primate and rodent bone marrow was developed in our laboratory. This method involves the seeding of stromal cells onto a nylon screen and the inoculation of fresh or cryopreserved bone marrow hematopoietic cells after stromal cell processes had extended across 3 to 4 out of every 5 mesh openings. Stromal cells attach, grow, and secrete matrix proteins which contribute to an intricate microenvironment for the support of multilineage hematopoiesis, which was observed for >270 days in the rat model and for >12 weeks in the human system, as evidenced by flow cytometry analysis and in vitro clonogenic assays. The adherent zones of these suspended nylon screen cultures consisted primarily of immature cells. These cultures could also be used as substrates for cytotoxicity measurements; treatment of rat bone marrow cultures of various ages with cytosine .beta.-D arabinofuranoside, cyclophosphamide, 5-fluorouracil, or methotrexate resulted in a dose-dependent decrease in CFU-C numbers and altered the phenotypic distribution of hematologic cells in the adherent zone. The use of a modification of this method to generate large numbers of active cytolytic cells after >75 days culture of rat bone marrow-derived natural killer cells is described also. Suspended nylon screen bone marrow culture also has potential uses in genetic insertion and graft vs. host disease studies, blood component therapy, the

evaluation of ex vivo purging programs, and in marrow expansion for transplantation.

CT EMTAGS: nonhuman (0777); male (0041); rat (0733); mammal (0738); controlled study (0197); conference paper (0061); apparatus, equipment and supplies (0510); animal tissue, cells or cell components (0105)

Medical Descriptors:

\*hematopoiesis

nonhuman

male

rat

controlled study

conference paper

animal cell

Drug Descriptors:

\*nylon

cytarabine: PD, pharmacology

cyclophosphamide: PD, pharmacology

fluorouracil: PD, pharmacology

methotrexate: PD, pharmacology

L167 ANSWER 5 OF 6 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Orbital aspergillosis. Conservative debridement and local amphotericin irrigation.

SO OPHTHALMIC PLAST. RECONSTR. SURG., (1989) 5/3 (207-211).

ISSN: 0740-9303 CODEN: OPRSEU

AB A patient maintained on long-term immunosuppressive agents after bone marrow transplantation developed an

Aspergillus abscess in the right orbit. The abscess was resected without visual compromise and the orbit was irrigated regularly with amphotericin B via an indwelling catheter. Follow-up computed tomography, surgical exploration, and histological analysis demonstrated suppression of fungal growth in the orbit. Persistent fungus was recovered from nonirrigated sinuses despite their previous surgical evacuation and continued systemic amphotericin B administration. Treatment of orbital aspergillosis should include surgical reduction of the local fungal inoculum, supplementation of intravenous antifungal agents with local delivery to minimize systemic toxicity, and attempts to reverse the immunosuppression. If the last is not possible, extensive extirpation of normal surrounding tissues will not prevent repopulation by the ubiquitous fungus.

CT EMTAGS: therapy (0160); fungus (0763); malignant neoplastic disease (0306); blood and hemopoietic system (0927); case report (0151); human (0888); infection (0310); female (0042); intravenous drug administration (0182); regional perfusion (0284)

Medical Descriptors:

\*orbit abscess: DT, drug therapy

\*orbit abscess: SU, surgery

\*aspergillus

\*debridement

leukemia

Drug Descriptors:

\*amphotericin b: DT, drug therapy

\*amphotericin b: AD, drug administration

L167 ANSWER 6 OF 6 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI A model system illustrating the isolation and enrichment of a rare population of tumour cells in bone marrow.

SO BONE MARROW TRANSPLANT., (1988) 3/6 (567-576).

ISSN: 0268-3369 CODEN: BMTRE

AB A model system employing a modified nylon **matrix** is described for the separation of rare cells titrated into either a leukaemic cell line or normal bone marrow. A 75- to 125-fold enrichment and recovery of the rare cell population was achieved, starting from an initial level of 0.014 to 0.2% of the total population. The rare cell population was identified by pre-labelling with Hoechst 33342, which intercalates into the DNA, and renders cells highly fluorescent. Separation and recovery of cells was totally dependent on the use of a panel of monoclonal antibodies binding to the labelled population. The nylon **matrix**, precoated with an anti-mouse immunoglobulin, traps the cells coated with monoclonal antibodies, and these can be released simply by gentle manipulation of the **matrix**. The **matrix** employed has been shown to not specifically trap committed bone marrow progenitors as determined by CFU-GM, BFU-E and CFU-GEMM assays. The use of this technique should simplify the isolation of rare tumour cells metastasizing to bone marrow.

CT EMTAGS: malignant neoplastic disease (0306); blood and hemopoietic system (0927); biological model (0502); human tissue, cells or cell components (0111); human (0888); methodology (0130)

Medical Descriptors:

\*bone marrow purging

\*tumor cell

\*leukemia cell

biological model

**matrix cell**

=> d l168 1-12 ti

L168 ANSWER 1 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI Immune response inhibition by irrigating subchondral bone with cytotoxic agents.

L168 ANSWER 2 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI [Tumor cell dissemination in bone marrow and peritoneal lavage. An immunocytochemical study in patients with gastric and colorectal carcinomas].

TUMORZELLDISSEMINATION IN DAS KNOCHENMARK UND IN DIE PERITONEALHOHLE. EINE IMMUNZYTOCHEMISCHE UNTERSUCHUNG AN PATIENTEN MIT EINEM MAGEN-ODER KOLOREKTALEN KARZINOM.

- L168 ANSWER 3 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Plasma interacts with mafosfamide toxicity to normal haematopoietic progenitor cells: Impact on in vitro marrow purging.
- L168 ANSWER 4 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI [Problems in the management of open tibial fractures].  
 PROBLEMI NEL TRATTAMENTO DELLE FRATTURE ESPOSTE DI GAMBA.
- L168 ANSWER 5 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Successful treatment of hemorrhagic cystitis secondary to cyclophosphamide chemotherapy with intravesical instillation of prostaglandin F2alpha.
- L168 ANSWER 6 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Role of autotransplantation in neuroblastoma.
- L168 ANSWER 7 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Pyrene butanol - an efficient, selective and non-metabolized photosensitizing agent for human myeloid leukemia cells.
- L168 ANSWER 8 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Lectin-binding properties of Burkitt's lymphoma cell lines: Application to bone marrow purging.
- L168 ANSWER 9 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Continuous infusion of complement by an automated cell processor enhances cytotoxicity of monoclonal antibody sensitized leukemia cells.
- L168 ANSWER 10 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Enrichment of human bone marrow aspirates for low-density mononuclear cells using a haemonetics discontinuous blood cell separator.
- L168 ANSWER 11 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Management of contaminated bone grafts.
- L168 ANSWER 12 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI [Treatment of compound comminuted and multifragment fractures with special consideration of Hoffmann's osteotaxis].  
 DIE BEHANDLUNG OFFENER STUCK- UND TRUMMERBRUCHE UNTER BESONDERER BERUICKSICHTIGUNG DER OSTEOTAXIS NACH HOFFMANN.

=> d l168 1,4,10,11,12 ti so ab ct

- L168 ANSWER 1 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI Immune response inhibition by irrigating subchondral bone with cytotoxic agents.  
 SO Clinical Orthopaedics and Related Research, (1996) /326 (96-106).  
 ISSN: 0009-921X CODEN: CORTBR  
 AB Attempts have been made (in the recent past) to inhibit the immune

response to fresh osteoarticular (shell) allografts because the occurrence and the magnitude of this response is considerably greater and more harmful than that seen after frozen bone and soft tissue allografts. To decrease the immunogenicity of these fresh grafts, the subchondral bone of rat distal femur allografts was irrigated with Betadine scrub solution (n = 10) or Triton-X (n = 11) before transplantation (Study 1). The Triton-X significantly reduced the immunogenicity of the grafts, but the Betadine scrub solution had no effect. A similar experiment with Triton-X was done in sheep where trochlear knee autografts (n = 3) were compared with unirrigated allografts (n = 3) and allografts receiving irrigation with Triton-X (n = 3) (Study 2). All 3 Triton-X irrigated allografts had no immune response, and showed much improved grafts compared with the control allografts (where an immune response developed in 2 of 3). Neither of the 2 allograft groups were as good as the autografts. These techniques may prove useful for inhibiting the recipient immune responses to fresh osteoarticular allografts in humans requiring partial joint reconstruction.

CT EMTAGS: sheep (0737); mammal (0738); histology (0330); autopsy (0170); heredity (0137); nonhuman (0777); rat (0733); animal experiment (0112); controlled study (0197); animal tissue, cells or cell components (0105); priority journal (0007); conference paper (0061)

Medical Descriptors:

\*bone allograft  
\*immune response  
\*antibody response

sheep  
autograft  
immunogenicity  
arthroplasty  
surgical technique  
histology  
autopsy  
biomechanics  
cytotoxicity test  
nonhuman  
rat  
animal experiment  
controlled study  
animal tissue  
animal cell  
priority journal  
conference paper

Drug Descriptors:

\*cytotoxic agent  
povidone iodine  
octoxinol  
ringer lactate solution

L168 ANSWER 4 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.  
 TI [Problems in the management of open tibial fractures].  
 PROBLEMI NEL TRATTAMENTO DELLE FRATTURE ESPOSTE DI GAMBA.  
 SO Minerva Ortopedica e Traumatologica, (1994) 45/11 (551-556).  
 ISSN: 0026-4911 CODEN: MOTRE8  
 AB The management of open tibial fractures is often complicated by delayed or non-union and deep infection. During the period 1988-1992, 51 consecutive cases in 49 patients were treated in the hospital of Pinerolo and were studied retrospectively with special attention paid to these issues. The treatment consisted of immediate thorough debridement of the wound and fixation of the fracture, which was obtained in most cases by means of unilateral half-pin external fixation frames. Continuous irrigation with saline solution was used after emergency debridement to complete the removal of foreign bodies and devitalized tissue from the wounds, largely reducing the need for repeated operative debridements. The mean healing time was 26.7 weeks; 12 reinterventions were needed to achieve consolidation (7 open-air cancellous bone grafts and 5 fibular osteotomies). Nine deep infections were reported, their frequency being higher in the patients who underwent primary wound closure. Their treatment required 4 open-air cancellous bone grafts and 3 delayed debridements. Forty-seven cases were reviewed (follow-up 29.4 months); most of them had a satisfactory end-result. The authors emphasize the open-air cancellous graft as a way to treat delayed union and bone loss; furthermore, they believe that bone grafting is in most open tibial fractures not mandatory. According to the authors' experience, continuous irrigation is a simple and effective method to manage traumatic wounds.  
 CT EMTAGS: injury (0301); therapy (0160); infection (0310); prevention (0165); mammal (0738); human (0888); clinical article (0152); conference paper (0061)  
 Medical Descriptors:  
 \*tibia fracture: TH, therapy  
 \*tibia fracture: SU, surgery  
 \*open fracture: TH, therapy  
 \*open fracture: SU, surgery  
 wound infection: PC, prevention  
 wound infection: CO, complication  
 retrospective study  
 bone graft  
 fracture fixation  
 fracture external fixation  
 debridement  
 wound irrigation  
 human  
 clinical article  
 conference paper

L168 ANSWER 10 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.



- TI Enrichment of human bone marrow aspirates for low-density mononuclear cells using a haemonetics discontinuous blood cell separator.
- SO VOX SANG., (1986) 50/3 (146-150).  
CODEN: VOSAAD
- AB Isopycnic density floatation centrifugation has been proven to be a suitable technique to enrich bone marrow aspirates for clonogenic cells on a small scale. We have tested a Haemonetics semicontinuous blood cell separator in order to process large volumes of bone marrow with minimal bone marrow manipulation. The efficacy of isopycnic density floatation was tested in a one and a two-step procedure. Both procedures showed a recovery of about 20% of the nucleated cells and 1-2% of the erythrocytes. The enrichment of clonogenic cells in the one-step procedure appeared superior to the two-step enrichment, first separating buffy coat cells. The recovery of clonogenic cells was 70 and 50%, respectively. Repopulation capacity of the low-density cell fraction containing the clonogenic cells was excellent after autologous reinfusion (6 cases) and allogeneic bone marrow transplantation (3 cases). Fast enrichment of large volumes of bone marrow aspirates with low-density cells containing the clonogenic cells by isopycnic density floatation centrifugation can be done safely using a Haemonetics blood cell separator.
- CT EMTAGS: priority journal (0007); methodology (0130); human tissue, cells or cell components (0111); human (0888); normal human (0800); blood and hemopoietic system (0927)  
Medical Descriptors:  
\*bone marrow  
\*cell separation  
\*bone marrow culture  
\*granulocytopoiesis  
\*mononuclear cell  
\*bone marrow purging  
isopycnic solution  
density gradient  
colony forming unit gm  
autologous bone marrow transplantation
- L168 ANSWER 11 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.
- TI Management of contaminated bone grafts.
- SO PLAST. RECONSTR. SURG., (1981) 68/3 (411-414).  
CODEN: PRSUAS
- AB Using an experimental animal model, the infection rate of contaminated bone grafts after irrigation with either normal saline, povidone-iodine, or a cefazolin solution was evaluated. Mechanical cleansing appears to be the important factor in preventing infection in these grafts, since all the solutions showed almost equal effectiveness. As the amount of bulk and dead space increases, particularly in Pseudomonas infections, povidone-iodine might be slightly superior, although this difference was not statistically

significant.

CT EMTAGS: bone (0962); rabbits and hares (0731); animal experiment (0112); infection (0310); biological model (0502); bacterium (0762); topical drug administration (0186)

Medical Descriptors:

\*bone graft  
 \*contamination  
 \*staphylococcus aureus  
 \*pseudomonas aeruginosa  
 \*wound infection  
 \*bone disease  
 \*cefazolin  
 \*povidone iodine  
 \*sodium chloride  
 animal model  
 rabbit  
 pseudomonas infection

L168 ANSWER 12 OF 12 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.

TI [Treatment of compound comminuted and multifragment fractures with special consideration of Hoffmann's osteotaxis].  
 DIE BEHANDLUNG OFFENER STUCK- UND TRUMMERBRUCHE UNTER BESONDERER BERUICKSICHTIGUNG DER OSTEOTAXIS NACH HOFFMANN.

SO UNFALLHEILKUNDE, (1977) 80/12 (523-535).  
 CODEN: UNFADZ

AB Since January 1, 1976, 42 compound comminuted and multifragment fractures (30 in the lower leg, 7 in the femur, and 5 in the pelvic bones) in 40 patients ranging from 16 to 77 years of age, have been treated by external fixation; 21 of the fractures were treated primarily or early secondarily, 21 were treated several weeks after the accident because of infection following other treatment such as internal osteosynthesis or skeletal traction and plaster cast. In 3 cases, infection occurred following primary external fixation and in 4 cases following early secondary external fixation. Preliminary results show 25 fractures healed, one nonunionally, and 13 other cases are still undergoing treatment. Of the 28 infected fractures, only 3 could not be controlled and required amputation; one of these patients died. Three infected fractures are still undergoing treatment. Two other patients died of other injuries. Our experience suggested a system of treatment described in 4 groups of problems: Comprehensive diagnosis covering skin, bone, circulation and viability of tissue (angiography, vital dye), innervation, muscle and tendon function (rupture, tissue pressure), and, in cases of infection, culture and sensitivity tests. Wound treatment beginning with the most exact removal of all foreign bodies and avascular tissue (use of Jet-Lavage system before excision). Then reconstruction of soft tissue (vessels), care of granulations (PVP-iodine), if necessary, and, finally, wound closure (reticulated polyurethane foam, split-skin graft, myoplasty). Stabilization of the fracture by Hoffmann's osteotaxis, its anchorage, application of external stress-bearing device, stability, and medical care to avoid

complications. Preventing infection: debridement, stability at the fracture site, suction drainage, open- and closed-irrigation drainage, Spirig's drainage, irrigation solution, avoidance of cavities by myoplasty, temporary use of gentamicin-PMMA balls according to Klemm before cancellous bone grafting, antibiotics.

CT EMTAGS: injury (0301); major clinical study (0150); therapy (0160); apparatus, equipment and supplies (0510)  
 Medical Descriptors:  
 \*comminuted fracture  
 \*fracture external fixation  
 \*osteosynthesis  
 \*osteotaxis

=> file medline

FILE 'MEDLINE' ENTERED AT 12:10:41 ON 27 MAR 1998

FILE LAST UPDATED: 26 MAR 1998 (19980326/UP). FILE COVERS 1966 TO DATE.

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THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

=> d l169 1-5 all

L169 ANSWER 1 OF 5 MEDLINE

AN 93322398 MEDLINE

DN 93322398

TI Determination of ascorbic acid by isotachophoresis with regard to its potential in neuroblastoma therapy.

AU Gebhardt S; Kraft K; Lode H N; Niethammer D; Schmidt K H; Bruchelt G

CS Children's Hospital, University of Tübingen, Germany.

SO JOURNAL OF CHROMATOGRAPHY, (1993 May 28) 638 (2) 235-40.

Journal code: HQF. ISSN: 0021-9673.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199310

AB Analytical capillary isotachophoresis was used to determine ascorbic acid (AA) in different matrices (cell-free system, neuroblastoma cell extracts and urine). The system for

**purging bone marrow of neuroblastoma**

cells, including 6-hydroxydopamine (6-OHDA) and AA, was analysed with regard to the interaction of AA with 6-OHDA and its autoxidation product, hydrogen peroxide. Furthermore, analyses concerning the uptake of AA into neuroblastoma cells as well as its excretion in urine after uptake of large amounts were carried out.

CT Check Tags: Human; Support, Non-U.S. Gov't

\*Ascorbic Acid: CH, chemistry  
 \*Ascorbic Acid: TU, therapeutic use  
 Cell Line  
 Chromatography, High Pressure Liquid  
 Electrochemistry  
 Electrophoresis  
 Hydrogen Peroxide: CH, chemistry  
 \*Neuroblastoma: CH, chemistry  
 \*Neuroblastoma: DT, drug therapy  
 Oxidopamine: CH, chemistry  
 Oxygen Consumption  
 Tumor Cells, Cultured

RN 1199-18-4 (Oxidopamine); 50-81-7 (Ascorbic Acid); 7722-84-1  
 (Hydrogen Peroxide)

L169 ANSWER 2 OF 5 MEDLINE

AN 93204262 MEDLINE

DN 93204262

TI Treatment of cyclophosphamide-induced hemorrhagic cystitis with  
 intravesical carboprost tromethamine.

AU Levine L A; Jarrard D F

CS Section of Urology, University of Chicago, Illinois..

SO JOURNAL OF UROLOGY, (1993 Apr) 149 (4) 719-23.

Journal code: KC7. ISSN: 0022-5347.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals; Cancer Journals  
 EM 199306

AB We review our experience with 18 consecutive patients who received  
 intravesical carboprost tromethamine, an F2-alpha prostaglandin, for  
 severe hemorrhagic cystitis following cyclophosphamide chemotherapy.  
 Of the patients 16 were given cyclophosphamide for conditioning  
 before **bone marrow transplantation** and  
 2 received the drug as cytotoxic therapy alone (dose range 3.6 to  
 15.8 gm.). All patients had severe gross hematuria that was  
 refractory to forced diuresis and to continuous saline bladder  
**irrigation**. The intravesical prostaglandin therapy was  
 initiated only after significant transfusion requirements (greater  
 than 1 unit packed red blood cells per day) and/or numerous catheter  
 manipulations for relief of clot retention. Eligible patients  
 underwent complete clot **evacuation** followed by  
 intravesical instillation of 0.4 to 1.0 mg.% carboprost tromethamine  
 for 2 hours 4 times per day, alternating with continuous saline  
 bladder **irrigation** for 2 hours. Six patients attempted an  
 alternate protocol of 0.8 to 1.0 mg.% carboprost tromethamine given  
 by continuous saline bladder **irrigation**. Complete  
 resolution of gross hematuria occurred in 9 patients (50%). Eight  
 patients had a partial response, with decreased transfusion  
 requirements noted. However, complete resolution ultimately required  
 an alternative therapy (for example formalin or urinary diversion).

One patient (6%) failed to respond and required formalin therapy on day 4 of carboprost tromethamine therapy. Decreased red blood cell transfusion requirements were noted during and after therapy when compared to pretreatment values. No changes in renal or bladder function were noted during the mean followup of 17 weeks (range 1 to 64 weeks). There were 3 cases of recurrent hematuria. Side effects were limited to bladder spasm in 14 of the 18 patients (78%), with no systemic complications. The results suggest that carboprost tromethamine is a useful bedside therapy for hemorrhagic cystitis due to cyclophosphamide, and treatment appears to have minimal toxicity.

CT Check Tags: Human  
Administration, Intravesical  
Adolescence  
Adult  
Blood Transfusion  
Carboprost: AD, administration & dosage  
\*Carboprost: TU, therapeutic use  
Child  
\*Cyclophosphamide: AE, adverse effects  
Cyclophosphamide: TU, therapeutic use  
\*Cystitis: CI, chemically induced  
\*Cystitis: DT, drug therapy  
Cystitis: TH, therapy  
Drug Combinations  
Hematuria: CI, chemically induced  
Hematuria: DT, drug therapy  
Hematuria: TH, therapy  
Treatment Outcome  
Tromethamine: AD, administration & dosage  
\*Tromethamine: TU, therapeutic use  
RN 35700-23-3 (Carboprost); 50-18-0 (Cyclophosphamide); 58551-69-2  
(carboprost tromethamine); 77-86-1 (Tromethamine)  
CN 0 (Drug Combinations)  
L169 ANSWER 3 OF 5 MEDLINE  
AN 91342207 MEDLINE  
DN 91342207  
TI Hematopoiesis on suspended nylon screen-stromal cell  
microenvironments.  
AU Naughton B A; Tjota A; Sibanda B; Naughton G K  
CS Medical Laboratory Sciences Department, Hunter College School of  
Health Sciences, New York, NY..  
SO JOURNAL OF BIOMECHANICAL ENGINEERING, (1991 May) 113 (2) 171-7.  
Journal code: K57. ISSN: 0148-0731.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199111  
AB A three-dimensional culture system for the growth of primate and

rodent bone marrow was developed in our laboratory. This method involves the seeding of stromal cells onto a nylon screen and the inoculation of fresh or cryopreserved bone marrow hematopoietic cells after stromal cell processes had extended across 3 to 4 out of every 5 mesh openings. Stromal cells attach, grow, and secrete matrix proteins which contribute to an intricate microenvironment for the support of multilineage hematopoiesis, which was observed for greater than 270 days in the rat model and for greater than 12 weeks in the human system, as evidenced by flow cytometry analysis and in vitro clonogenic assays. The adherent zones of these suspended nylon screen cultures consisted primarily of immature cells. These cultures could also be used as substrates for cytotoxicity measurements; treatment of rat bone marrow cultures of various ages with cytosine beta-D arabinofuranoside, cyclophosphamide, 5-fluorouracil, or methotrexate resulted in a dose-dependent decrease in CFU-C numbers and altered the phenotypic distribution of hematologic cells in the adherent zone. The use of a modification of this method to generate large numbers of active cytolytic cells after greater than 75 days culture of rat bone marrow-derived natural killer cells is described also. Suspended nylon screen bone marrow culture also has potential uses in genetic insertion and graft vs. host disease studies, blood component therapy, the evaluation of ex vivo purging programs, and in marrow expansion for transplantation.

CT Check Tags: Animal; Male  
 Antibodies, Monoclonal: DU, diagnostic use  
 \*Bone Marrow  
 Bone Marrow: CY, cytology  
 Bone Marrow: DE, drug effects  
 Bone Marrow: IM, immunology  
 Cells, Cultured: DE, drug effects  
 Clone Cells  
 \*Colony-Forming Units Assay: MT, methods  
 Cyclophosphamide: PD, pharmacology  
 Cytarabine: PD, pharmacology  
 Cytotoxicity Tests, Immunologic  
 Dose-Response Relationship, Drug  
 Flow Cytometry  
 Fluorouracil: PD, pharmacology  
 Killer Cells, Natural  
 Methotrexate: PD, pharmacology  
 Phenotype  
 Rats  
 RN 147-94-4 (Cytarabine); 50-18-0 (Cyclophosphamide); 51-21-8  
 (Fluorouracil); 59-05-2 (Methotrexate)  
 CN 0 (Antibodies, Monoclonal)  
 L169 ANSWER 4 OF 5 MEDLINE  
 AN 91044122 MEDLINE  
 DN 91044122

TI Ether lipids and derivatives as investigational anticancer drugs. A brief review.

AU Berdel W E

CS Department of Medicine I, Technische Universitat, Munich, FRG.

SO ONKOLOGIE, (1990 Aug) 13 (4) 245-50. Ref: 71

Journal code: OHR. ISSN: 0378-584X.

CY Switzerland

DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)

LA English

FS Priority Journals

EM 199102

AB There is considerable evidence that certain ether lipids represent a new class of antineoplastic agents. The activity of some of these structures is partially mediated through non-specific host resistance cells. In addition, more importantly, these ether lipids have been shown to be cytotoxic for cells from a wide variety of tumors and leukemias. The site of the cytotoxic action of ether lipids appears to be the cell membrane. They inhibit the biosynthesis of phosphatidylcholine as well as the activity of protein kinase C and might interfere with some growth factor receptors. Higher concentrations of some of these compounds are not compatible with the lipid bilayer matrix of the membrane. However, it remains uncertain whether or not these effects represent the only mechanisms for the cytotoxic action of this material. Further experiments elucidating the molecular mechanisms in the cytotoxicity of these compounds are necessary. In vivo a wide variety of mouse and rat tumors have been found to be sensitive to the therapeutic activity of ether lipids, with other tumor and leukemia models, however, being resistant to this material. Clinical phase I pilot trials have been completed, showing tumor response in a small number of patients treated, and 3 drugs are currently in phase II studies. Some of these ether lipids are preferentially cytotoxic to leukemic cells in comparison with normal bone marrow cells within a certain dose range. Thus, they are suitable for purging residual leukemic cells from remission bone marrow used for autologous bone marrow transplantation. A phase I/II study of autologous bone marrow transplantation in acute leukemia using bone marrow cells treated with ether lipids is in progress.

CT Check Tags: Animal; Human; Support, Non-U.S. Gov't  
\*Antineoplastic Agents: TU, therapeutic use  
Drug Evaluation  
\*Leukemia, Experimental: DT, drug therapy  
Mice  
\*Neoplasms, Experimental: DT, drug therapy  
\*Phospholipid Ethers: TU, therapeutic use  
Pilot Projects  
Structure-Activity Relationship

\*Tumor Cells, Cultured: DE, drug effects  
 RN 65492-82-2 (edelfosine)  
 CN 0 (Antineoplastic Agents); 0 (Phospholipid Ethers)

L169 ANSWER 5 OF 5 MEDLINE  
 AN 90175523 MEDLINE  
 DN 90175523  
 TI Immunomagnetic manipulation of bone marrow and tumour cells: an update.  
 AU Kemshead J T; Elsom G; Patel K  
 CS ICRF Oncology Laboratory, Institute of Child Health, London, United Kingdom..  
 SO PROGRESS IN CLINICAL AND BIOLOGICAL RESEARCH, (1990) 333 235-50; discussion 251. Ref: 38  
 Journal code: PZ5. ISSN: 0361-7742.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 General Review; (REVIEW)  
 (REVIEW, TUTORIAL)  
 LA English  
 FS Priority Journals  
 EM 199006  
 AB The immunomagnetic separation procedure for the separation of neuroblasts from bone marrow harvested for autologous transplantation was first described in 1983 (Treleaven et al., 1984). In the intervening period, the technique has been extended to other tumours and modified by several laboratories. In addition, the procedure has been used for the separation of different mammalian cell types (Nilsson et al., 1987), micro-organisms (Lund et al., 1988) and at the subcellular level, organelles (Howell et al., 1988), and DNA (Dudin et al., 1988). Although immunomagnetic separation techniques have been used extensively for bone marrow purging, the recovery of cells from the matrix has remained problematical. This manuscript is intended to offer an update on our experiences in the use of the immunomagnetic purging procedure. In addition, more detailed basic studies have been undertaken to characterize further the antigens recognized by the antibodies for the removal of neuroblasts from bone marrow. The information obtained in these studies may, in part, explain why it is intrinsically more difficult to separate neuroblasts from the magnetic matrix than haematopoietic cells such as either T or acute lymphoblastic leukaemic cells.

CT Check Tags: Human; In Vitro; Support, Non-U.S. Gov't  
 \*Antibodies, Monoclonal: TU, therapeutic use  
 Antigens, Neoplasm: IM, immunology  
 \*Bone Marrow: CY, cytology  
 Bone Marrow: IM, immunology  
 \*Bone Marrow Transplantation: MT, methods  
 Cell Count  
 Colony-Forming Units Assay



Combined Modality Therapy  
 Magnetics  
 Microspheres  
 Neoplasms: IM, immunology  
 Neoplasms: MO, mortality  
 \*Neoplasms: TH, therapy  
 Survival Rate

CN 0 (Antibodies, Monoclonal); 0 (Antigens, Neoplasm)

=> d 1170 1-17 ti

L170 ANSWER 1 OF 17 MEDLINE

TI Immunocytochemical detection of breast cancer cells: a comparison of three attachment factors.

L170 ANSWER 2 OF 17 MEDLINE

TI [Tumor cell dissemination in bone marrow and peritoneal cavity. An immunocytochemical study of patients with stomach or colorectal carcinoma].

Tumorzell dissemination in das knochenmark und in die peritonealhohle. Eine immunzytochemische untersuchung an patienten mit einem magen; oder kolerektalen karzinom.

L170 ANSWER 3 OF 17 MEDLINE

TI The combination of melphalan, cyclophosphamide and cytosine arabinoside as a conditioning regimen for autologous bone marrow transplantation for acute leukemia.

L170 ANSWER 4 OF 17 MEDLINE

TI Phototoxicity of some bromine-substituted rhodamine dyes: synthesis, photophysical properties and application as photosensitizers.

L170 ANSWER 5 OF 17 MEDLINE

TI Immune response inhibition by irrigating subchondral bone with cytotoxic agents.

L170 ANSWER 6 OF 17 MEDLINE

TI Plasma interacts with mafosfamide toxicity to normal haematopoietic progenitor cells: impact on in vitro marrow purging.

L170 ANSWER 7 OF 17 MEDLINE

TI Successful treatment of hemorrhagic cystitis secondary to cyclophosphamide chemotherapy with intravesical instillation of prostaglandin F2 alpha.

L170 ANSWER 8 OF 17 MEDLINE

TI Role of autotransplantation in neuroblastoma.

L170 ANSWER 9 OF 17 MEDLINE

TI Pyrene butanol--an efficient, selective and non-metabolized photosensitizing agent for human myeloid leukemia cells.

L170 ANSWER 10 OF 17 MEDLINE

TI Toxic effects of alkyl-lysophospholipids on human bone marrow and de novo leukaemias. A short overview.

L170 ANSWER 11 OF 17 MEDLINE

TI Resection and immediate reconstruction of parts of the mandible via intra-oral route.

L170 ANSWER 12 OF 17 MEDLINE

TI The role of bone marrow transplantation in the non-Hodgkin's lymphomas.

L170 ANSWER 13 OF 17 MEDLINE

TI Lectin-binding properties of Burkitt's lymphoma cell lines: application to bone marrow purging.

L170 ANSWER 14 OF 17 MEDLINE

TI Continuous infusion of complement by an automated cell processor enhances cytotoxicity of monoclonal antibody sensitized leukemia cells.

L170 ANSWER 15 OF 17 MEDLINE

TI The role of high-dose therapy and autologous bone marrow reinfusion in the treatment of malignant lymphomas.

L170 ANSWER 16 OF 17 MEDLINE

TI Management of contaminated bone grafts.

L170 ANSWER 17 OF 17 MEDLINE

TI [Irrigation of the bone marrow canal in the treatment of acute hematogenic osteomyelitis in children]. Protochnoe promyvanie kostnomozgovogo kanala pri lechenii ostrogo gematogennogo osteomielita u detei.

=> d 1170 5,11,15,17 all

L170 ANSWER 5 OF 17 MEDLINE

AN 96208084 MEDLINE

DN 96208084

TI Immune response inhibition by irrigating subchondral bone with cytotoxic agents.

AU Rodrigo J J; Heiden E; Hegyes M; Sharkey N A

CS Department of Orthopaedic Surgery, University of California, Davis, Sacramento 95816, USA.

SO CLINICAL ORTHOPAEDICS AND RELATED RESEARCH, (1996 May) (326) 96-106. Journal code: DFY. ISSN: 0009-921X.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 199608  
 AB Attempts have been made (in the recent past) to inhibit the immune response to fresh osteoarticular (shell) allografts because the occurrence and the magnitude of this response is considerably greater and more harmful than that seen after frozen bone and soft tissue allografts. To decrease in immunogenicity of these fresh grafts, the subchondral bone of rat distal femur allografts was irrigated with Betadine scrub solution (n = 10) or Triton-X (n = 11) before transplantation (Study 1). The Triton-X significantly reduced the immunogenicity of the grafts, but the Betadine scrub solution had no effect. A similar experiment with Triton-X was done in sheep where trochlear knee autografts (n = 3) were compared with unirrigated allografts (n = 3) and allografts receiving irrigation with Triton-X (n = 3) (Study 2). All 3 Triton-X irrigated allografts had no immune response, and showed much improved grafts compared with the control allografts (where an immune response developed in 2 of 3). Neither of the 2 allograft groups were as good as the autografts. These techniques may prove useful for inhibiting the recipient immune responses to fresh osteoarticular allografts in humans requiring partial joint reconstruction.

CT Check Tags: Animal; Support, Non-U.S. Gov't  
 \*Anti-Infective Agents, Local: TU, therapeutic use  
 \*Bone Transplantation: IM, immunology  
 \*Cartilage: TR, transplantation  
 Cytotoxicity Tests, Immunologic  
 \*Graft Rejection  
 Irrigation  
 \*Octoxynol: TU, therapeutic use  
 \*Povidone-Iodine: TU, therapeutic use  
 Rats  
 Rats, Inbred Lew  
 Sheep  
 Transplantation, Autologous  
 Transplantation, Homologous

RN 25655-41-8 (Povidone-Iodine); 9002-93-1 (Octoxynol)  
 CN 0 (Anti-Infective Agents, Local)

L170 ANSWER 11 OF 17 MEDLINE  
 AN 90238932 MEDLINE  
 DN 90238932  
 TI Resection and immediate reconstruction of parts of the mandible via intra-oral route.  
 AU Arole G; Nnabueze E; Rosanwo M O  
 SO ODONTO-STOMATOLOGIE TROPICALE, (1989 Jun) 12 (2) 59-62.  
 Journal code: PCK. ISSN: 0251-172X.  
 CY Senegal  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Dental Journals; Dental

EM 199008  
 AB Our experience in partial resection of parts of the mandible with immediate reconstruction using the iliac crest via the intraoral route is presented. 12 patients were treated in this way and the follow up varied between 1 to 3 years. The criteria assessed in the follow up included, behaviour of the bone graft, aesthetics functional behaviour of the bone transplant under the denture plates, and function of the mandibular branch of the facial nerve. Though infection with discharge of pus was noticed a few days post-operatively, with meticulous care with the use of systemic antibiotics and local irrigation of the wounds with antibiotics solution, the infection was usually overcome. Only in 2 cases were the bone grafts removed because the patients could not tolerate the nasogastric tube feeding for more than 2 or 3 days post-operatively and there was wound dehiscence with exposure of the graft. However the result achieved in this study made us conclude that the intra-oral approach for resection and immediate reconstruction of parts of the mandible will be our method of choice whenever possible.

CT Check Tags: Female; Human; Male  
 Adolescence  
 Adult  
 \*Bone Transplantation: MT, methods  
 \*Mandibular Diseases: SU, surgery  
 \*Mandibular Neoplasms: SU, surgery

L170 ANSWER 15 OF 17 MEDLINE  
 AN 89027764 MEDLINE  
 DN 89027764  
 TI The role of high-dose therapy and autologous bone marrow reinfusion in the treatment of malignant lymphomas.  
 AU Williams S F; Schilsky R L; Ultmann J E; Samuels B L  
 CS Department of Medicine, University of Chicago, Illinois.  
 NC 2P30 CA 14599-14 (NCI)  
 SO CANCER INVESTIGATION, (1988) 6 (4) 427-37. Ref: 65  
 Journal code: CAI. ISSN: 0735-7907.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 General Review; (REVIEW)  
 (REVIEW LITERATURE)  
 LA English  
 FS Priority Journals; Cancer Journals  
 EM 198902  
 AB In a significant fraction of patients with NHL or HD, disease develops that is resistant to conventional chemotherapy. Experience using high-dose chemotherapy, with or without TBI, and ABMR is expanding. In HD, remissions can be achieved in approximately half of the patients with relapsed advanced disease. This may also be true in patients with NHL who do not respond to conventional regimens. High-dose chemoradiotherapy regimens are toxic and require extensive supportive care. Relapse frequently occurs in areas of

previous disease, suggesting failure of the conditioning regimen rather than an infusion of occult tumor cells in the autologous bone marrow had occurred. Thus, the role of marrow purging in this therapy needs to be further evaluated and compared with findings involving nonpurged marrow reinfusion. It is also important to evaluate the effects of more vigorous attempts at cytoreduction of bulky disease prior to high-dose therapy and ABMR. We recommend that high-dose therapy and ABMR in an investigational setting be used (1) in patients with HD who experience relapse after MOPP/ABVD or equivalent regimens and (2) in patients with intermediate or high-grade NHL whose disease recurs or is resistant to conventional regimens. Potential areas for development include the use of this modality as intensification therapy following conventional therapy in patients with intermediate or high-grade NHL with poor prognostic features. Toxicity can be decreased and efficacy increased only if therapy is administered to patients who have not been heavily pretreated and who have lower tumor burden and a good performance status. The role of high-dose chemotherapy of ABMR in the nodular lymphomas is not known at this point. Finally, high-dose ABMR therapy has a definite role in salvaging patients with malignant lymphomas. Many issues need to be resolved, including (i) the optimal timing of this approach, (ii) the optimal conditioning regimen, and (iii) the need for purging bone marrow prior to reinfusion. The past 10 years have led to significant gains. During the next 10 years, it may be possible to refine this therapy and find solutions to the above issues.

CT Check Tags: Human; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

\*Antineoplastic Agents: AD, administration & dosage

\*Bone Marrow: TR, transplantation

\*Bone Marrow Transplantation

Combined Modality Therapy

Hodgkin Disease: TH, therapy

\*Lymphoma: TH, therapy

Transplantation, Autologous

Whole-Body Irradiation

CN 0 (Antineoplastic Agents)

L170 ANSWER 17 OF 17 MEDLINE

AN 77106139 MEDLINE

DN 77106139

TI [Irrigation of the bone marrow canal in the treatment of acute hematogenic osteomyelitis in children]. Protochnoe promyvanie kostnomozgovogo kanala pri lechenii ostrogo gematogennogo osteomielita u detei.

AU Misharev O S; Kat'ko V A

SO VESTNIK KHIRURGII IMENI I. I. GREKOVA, (1976 Dec) 117 (12) 67-70. Journal code: XA4. ISSN: 0042-4625.

CY USSR

DT Journal; Article; (JOURNAL ARTICLE)

LA Russian  
 FS Priority Journals  
 EM 197705  
 AB The method of treatment of acute hematogenic osteomyelitis of long tubular bones in children is described. This method was employed in 31 children, aged from 3 to 14 years, with acute hematogenic osteomyelitis. The complete recovery was noted in 27 cases, in 4--due to late hospitalization and secondary infection the inflammatory process became chronic.  
 CT Check Tags: Human  
 Acute Disease  
 Adolescence  
 Anti-Infective Agents, Local: TU, therapeutic use  
 Bone Marrow  
 Child  
 Child, Preschool  
 Drainage  
 Drug Combinations  
 English Abstract  
 Hydantoins: AD, administration & dosage  
 Hydantoins: TU, therapeutic use  
 \*Irrigation: MT, methods  
 Nitrofurans: AD, administration & dosage  
 Nitrofurans: TU, therapeutic use  
 \*Osteomyelitis: TH, therapy  
 Solutions

=> d his 1171-

(FILE 'WPIDS' ENTERED AT 12:02:03 ON 27 MAR 1998)

FILE 'BIOSIS' ENTERED AT 12:04:32 ON 27 MAR 1998

FILE 'EMBASE' ENTERED AT 12:06:30 ON 27 MAR 1998

FILE 'MEDLINE' ENTERED AT 12:10:41 ON 27 MAR 1998

FILE 'WPIDS, BIOSIS, EMBASE, MEDLINE' ENTERED AT 12:14:50 ON 27 MAR 1998

L171 37 FILE WPIDS  
 L172 1626 FILE BIOSIS  
 L173 1680 FILE EMBASE  
 L174 2013 FILE MEDLINE  
 TOTAL FOR ALL FILES  
 L175 5356 S ASPIRAT?(5A) (BONEMARROW? OR BONE#(3A)MARROW?)  
 L176 5 FILE WPIDS  
 L177 25 FILE BIOSIS  
 L178 37 FILE EMBASE  
 L179 32 FILE MEDLINE  
 TOTAL FOR ALL FILES  
 L180 99 S L175 AND GRAFT?

L181 0 FILE WPIDS  
L182 0 FILE BIOSIS  
L183 0 FILE EMBASE  
L184 0 FILE MEDLINE

TOTAL FOR ALL FILES

L185 0 S L180 AND L21  
L186 1 FILE WPIDS  
L187 0 FILE BIOSIS  
L188 0 FILE EMBASE  
L189 0 FILE MEDLINE

TOTAL FOR ALL FILES

L190 1 S L180 AND L6  
L191 3 FILE WPIDS  
L192 1 FILE BIOSIS  
L193 0 FILE EMBASE  
L194 1 FILE MEDLINE

TOTAL FOR ALL FILES

L195 5 S L180 AND L26

FILE 'WPIDS' ENTERED AT 12:17:58 ON 27 MAR 1998

L196 5 S (L176 OR L191) NOT (L138 OR L164)

=> d l196 1-5 ibib abs

L196 ANSWER 1 OF 5 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 98-110188 [10] WPIDS

DOC. NO. NON-CPI: N98-088260

DOC. NO. CPI: C98-036155

TITLE: Composite bone grafts preparation - by  
passing bone marrow  
aspirate suspension through porous,  
biocompatible, implantable substrate.

DERWENT CLASS: B04 D22 P34

INVENTOR(S): MUSCHLER, G F

PATENT ASSIGNEE(S): (CLEV-N) CLEVELAND CLINIC FOUND

COUNTRY COUNT: 21

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9800174	A2	980108	(9810)*	EN	31
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: AU CA JP KR					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9800174	A2	WO 97-US16514	970703

PRIORITY APPLN. INFO: US 96-675498 960703

AN 98-110188 [10] WPIDS

AB WO 9800174 A UPAB: 980309

Preparation of a composite bone graft, comprises: (a) providing a **bone marrow aspirate** suspension; and (b) passing the suspension through a porous, biocompatible, implantable substrate.

Also claimed are (1) a composite bone marrow graft, comprising: (a) a porous, biocompatible, implantable substrate; (b) a heterogeneous population of nucleated bone marrow cells; and (c) an enriched population of connective tissue progenitor cells; (2) a kit for preparing a composite **bone marrow graft** from a **bone marrow**

**aspirate** suspension, comprising: (a) a porous, biocompatible, implantable substrate; and (b) a container for holding the substrate, the container being configured to retain the substrate and to permit throughflow of the aspirate suspension and having two ends, each end defining an opening and (3) a method for increasing the concentration of connective tissue progenitor cells in an isolated population of bone marrow cells, comprising: (a) passing a **bone marrow aspirate** suspension through a porous, biocompatible, implantable substrate, to provide a **matrix** to which nucleated bone marrow cells are chemically bonded; (b) disassociating the nucleated cells from the **matrix**; and (c) collecting the disassociated cells.

USE - The bone grafts may be used e.g. to treat fractures or to induce arthrodeses.

ADVANTAGE - The processes may be performed intraoperatively i.e. at the same time that bone marrow is being taken from the **grantee**. This reduces the time and expense for **graft** preparation and also reduces the number of times the **grantee** must return to the operating room to undergo invasive procedures.

Dwg.1/3

L196 ANSWER 2 OF 5 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 97-165434 [15] WPIDS

DOC. NO. NON-CPI: N97-136183

DOC. NO. CPI: C97-053413

TITLE: Selective sepn. of cells from suspension using ligand-modified membrane - and release of retained cells by application of back pressure, e.g. for removing cancer cells and T lymphocytes from bone marrow **grafts**.

DERWENT CLASS: B04 C06 D16 S03

INVENTOR(S): COLTON, C K; POMIANEK, M J

PATENT ASSIGNEE(S): (MASI) MASSACHUSETTS INST TECHNOLOGY

COUNTRY COUNT: 19

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG



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 WO 9707389 A1 970227 (9715)\* EN 30  
 RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
 W: CA JP

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9707389	A1	WO 96-US13361	960816

PRIORITY APPLN. INFO: US 95-2482 950818

AN 97-165434 [15] WPIDS

AB WO 9707389 A UPAB: 970410

A mixt. of two cell types (A,B) present in suspension is sepd. by:  
 (i) contacting the suspension with a porous material (PM) carrying  
 ligands (I) that can bind to (A) to form a PM-(I)-(A) complex; (ii)  
 removing cells B from the PM; (iii) applying a back pressure across  
 the complex to detach (A); and (iv) recovering the detached cells.  
 More generally the use of back pressure to detach cells adsorbed on  
 a PM is also new.

USE - The method is used for the sepn. of animal or plant cells  
 or microorganisms present e.g. in blood, lymph and bone  
**marrow aspirate**. Typical applications are removal  
 of cancer cells and T lymphocytes from bone marrow grafts;  
 selection of stem cells for marrow transplants or of specific white  
 blood cell subpopulations for transfusion; selection of  
 antigen-specific hybridomas or pancreatic islet cells; removal of  
 HIV infected cells for treatment of AIDS; and isolation of stem  
 cells from bone marrow or peripheral blood for treatment of  
 malignancies and leukaemias.

ADVANTAGE - The method is very specific for a chosen cell type  
 and most (esp. > 95%) of the detached cells are viable.  
 Dwg.2/3

L196 ANSWER 3 OF 5 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 95-263651 [34] WPIDS

DOC. NO. NON-CPI: N95-202683

DOC. NO. CPI: C95-120059

TITLE: Proteins stimulating growth of prostate cells and  
 related antibodies - useful in treatment and  
 diagnosis of prostate cancer and as cell culture  
 additives in screening cpds. for anticancer  
 activity.

DERWENT CLASS: B04 D16 S03

INVENTOR(S): CHAN, J; CHUNG, L W K; HSIEH, J; LOGOTHETIS, C

PATENT ASSIGNEE(S): (TEXA) UNIV TEXAS SYSTEM

COUNTRY COUNT: 20

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9518825	A1	950713	(9534)*	EN	92
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
W: AU CA JP					
AU 9514489	A	950801	(9546)		
EP 738279	A1	961023	(9647)	EN	
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE					
JP 09511130	W	971111	(9804)		75

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9518825	A1	WO 95-US94	950105
AU 9514489	A	AU 95-14489	950105
EP 738279	A1	EP 95-906166	950105
		WO 95-US94	950105
JP 09511130	W	JP 95-518582	950105
		WO 95-US94	950105

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9514489	A Based on	WO 9518825
EP 738279	A1 Based on	WO 9518825
JP 09511130	W Based on	WO 9518825

PRIORITY APPLN. INFO: US 94-179569 940107

AN 95-263651 [34] WPIDS

AB WO 9518825 A UPAB: 950904

The following are claimed: (1) purified human growth factor that stimulates prostate cell growth produced by: (i) culturing human bone stromal cells (HBSC) in serum conditioned medium; (ii) passing the conditioned medium through a heparin-affinity column in a low salt contg. buffer to bind the growth factor; (iii) washing the column to remove 1 contaminants; (iv) eluting with a high salt buffer; (v) fractionating according to size; and (vi) purificn. by SDS-PAGE with electroelution; (2) purified HGF able to stimulate growth of LNCaP (lymph node derived prostatic cancer) cells in soft agar in presence of antibody against bFGF, KGF and HGF, that is isolated from HBSC or human bone marrow

aspirates, has mol. wt. about 220 kD by size exclusion HPLC and has biological activity that is sensitive to heat or trypsin; (3) a compsn. comprising HGF polypeptide including the following characteristics: (i) an approximate mol. wt. of 157 kD as determined by SDS-PAGE in the absence or presence of beta-mercaptoethanol or dithiothreitol when isolated from the bone stromal cells; and (ii) an approximate mol. wt. of 157 kD as determined by non-reducing SDS-PAGE and an approximate mol. wt. of 55kD as determined by

reducing SDS-PAGE when isolated from **bone marrow aspirates**; (4) an antibody having binding affinity for any one of the factors of claim (1), (2) or (3); (5) a method of purifying a factor that stimulates the growth of LNCaP cells in soft agar in the presence of an antibody against bFGF, KGF or HGF comprising: (i) obtaining a conditioned media from cultured human bone stromal cells or a human **bone marrow aspirate**; and (ii) binding the conditioned media or aspirate to an antibody; (6) a compsn. comprising a purified HGF capable of stimulating androgen-independent prostate specific antigen (AIPSA) formation, comprising: (i) obtaining LNCaP sublines from tumours maintained in castrated animal hosts; (ii) culturing the sublines in serum conditioned media to produce conditioned media; and (iii) precipitating with 60-80% ammonium sulphate; (7) a compsn. of purified HGF: (i) that can stimulate AIPSA formation in human prostate cancer cells; (ii) that is isolatable from human **bone marrow aspirates**; (iii) that is isolatable from LNCaP sublines obtainable from tumours maintained in castrated hosts; (iv) that has a biological activity that is sensitive and acid labile; and (v) a biological activity that is trypsin insensitive; (8) a method of early prognosis of androgen-independent human prostate tumour progression, comprising: (i) obtaining human **bone marrow aspirates** from the subject; (ii) and assaying them for the presence of the factor of claim (6); (9) culturing cells by placing them in the appropriate cell culture medium and incorporating an amt. of the growth factor in the accordance with claims (1), (2) and (3), where the amt. of growth factor is 100-1000 units per 5multiplied by 10<sup>6</sup> cells; and (10) a method of propagating or expanding stem cells in cell culture comprising contacting the cells in an appropriate medium contg. a growth factor in accordance with claims (1), (2) or (3).

USE - Ab (opt. bound to a **matrix**) are used to purify HGF, also (opt. in the form of conjugates) for treatment and diagnosis (imaging) of prostatic cancer. Detection of HGF in **bone marrow aspirate** gives an early prognosis of androgen-independent prostatic cancer progression, partic. to establish whether the increase in PSA in serum is regulated by androgens with androgen ablation therapy (all claimed). HGF can also be added to cultures to stimulate growth of prostatic **grafts** as angiogenic agents (for wound healing, organ regeneration, etc.). Test animals treated with LNCaP and one of the new growth factors provide a model for testing cpds. for action on prostate cells, e.g. the new Ab-conjugates.

Dwg.0/7

L196 ANSWER 4 OF 5 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 93-249769 [31] WPIDS  
 CROSS REFERENCE: 95-357433 [45]  
 DOC. NO. CPI: C93-110787  
 TITLE: Mineralising collagen to form bone substitute - by

treating collagen dispersion with sources of calcium and phosphate ions.

DERWENT CLASS: B04 D22

INVENTOR(S): CONSTANTZ, B R; GUNASEKARAN, S

PATENT ASSIGNEE(S): (NORI-N) NORIAN CORP

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5231169	A	930727	(9331)*		4

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5231169	A	Cont of	
		US 90-599000	901017
		US 92-842788	920226

PRIORITY APPLN. INFO: US 90-599000 901017; US 92-842788 920226

AN 93-249769 [31] WPIDS

CR 95-357433 [45]

AB US 5231169 A UPAB: 951128

Method comprises: (a) prepn. in presence of a dispersion of solubilised or dispersed collagen fibrils in aq. medium pH 10-13, by adding over a period of at least 1 hr a source of soluble Ca and soluble phosphate to the dispersion in the correct ratio to produce a prod. contg. 30-80 wt. % of collagen; and (b) collecting the prod.

USE - The prod. has desirable physical characteristics mimicking those of bone and has many biomedical uses as a replacement bone. These include prosthetic devices, bone filler, osteoconductive grafting material for non-union fractures or as a periodontal or bony decay filler. By combining with an osteoinductive material e.g. autologous aspirated

bone marrow, bone morphogenic protein, calcitonin or other growth factors, bone induction and growth are further enhanced. The compsn. can also be used in soft tissue augmentation e.g. for the urinary splinter or for dermal wrinkles, and in burn tissue repair; also as a haemostatic agent, partic. for hard tissue bleeding. The nature of the prod. can vary widely, due to other ions e.g. CO<sub>3</sub>, Cl, F, Na or NH<sub>4</sub>, being present or by cross linking.

Dwg.0/0

Dwg.0/0

L196 ANSWER 5 OF 5 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

ACCESSION NUMBER: 87-293113 [42] WPIDS

CROSS REFERENCE: 87-306747 [43]; 90-077202 [11]; 90-115985 [15];

95-381883 [48]; 96-221250 [22]; 97-258218 [23]

DOC. NO. CPI: C87-124406

TITLE: Replication of bone marrow in vitro for transplantation use - comprises incubating bone marrow stem cells in reticular fibre network from fibroblasts and medium conditioned with macrophage secretions.

DERWENT CLASS: A96 B04 D16 D22 P31

INVENTOR(S): NAUGHTON, G K

PATENT ASSIGNEE(S): (MARR-N) MARROW GRP INT; (NAUG-I) NAUGHTON B A;  
(MARR-N) MARROW-TECH INC

COUNTRY COUNT: 18

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 241578	A	871021	(8742)*	EN	5
R: AT BE CH DE FR GB IT LI LU NL SE					
AU 8659850	A	871022	(8749)		
JP 62249926	A	871030	(8749)		
ZA 8702805	A	871008	(8801)		
US 4721096	A	880126	(8807)		4
JP 01503195	W	891102	(8950)		
CA 1282725	C	910409	(9131)		
IL 85957	A	940624	(9427)		
RO 106655	B1	930630	(9434)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 241578	A	EP 86-111709	860823
JP 62249926	A	JP 86-191567	860815
ZA 8702805	A	ZA 87-2805	870421
US 4721096	A	US 87-36154	870403
JP 01503195	W	JP 87-502719	870415
IL 85957	A	IL 88-85957	880401
RO 106655	B1	RO 87-135557	870415
		WO 87-US869	870415

FILING DETAILS:

PATENT NO	KIND	PATENT NO
RO 106655	B1 Based on	WO 8706120

PRIORITY APPLN. INFO: US 86-853569 860418; US 87-36154 870403; US 89-402104 890901

AN 87-293113 [42] WPIDS

CR 87-306747 [43]; 90-077202 [11]; 90-115985 [15]; 95-381883 [48]; 96-221250 [22]; 97-258218 [23]

AB EP 241578 A UPAB: 970612

Replication of bone marrow in vitro is effected by: (a) establishing

a reticular fibre network by subsetting fibroblasts; (b) conditioning a culture medium with secretory prods. of extra-medullary macrophages and with secretory prods of marrow stromal cells to produce a conditioned medium; (c) providing the reticular fibre network within the medium; (d) innoculating the medium with a bone marrow sample, including haemotopoietic stem cells; and (e) incubating the culture to produce a replicated bone marrow contg. haeomotropoietic stem cells having marrow repopulating activity.

USE/ADVANTAGE - The replicated bone marrow cells are useful in bone marrow transplantation, e.g. on patients suffering from disease such as cancer.

Dwg.0/0

ABEQ US 4721096 A UPAB: 930922

Person whose bone marrow has been destroyed or has lost its functional ability is treated by (a) obtaining a bone marrow sample (I) from a donor and then (b) replicating sample (I) in vitro to produce a replicated bone marrow (II) contg. haematopoietic stem cells having marrow repopulating activity, and then c) infusing (II) into the person to restore hematopoiesis in the person.

Process pref. comprises the further step of cryopreserving sample (I) prior to replicating the bone marrow sample. Pref. sample (I) is obtd. by aspirating a bone marrow sample from the iliac crest of the donor.

ADVANTAGE - Graft versus host reaction is not produced, nor are marrow emboli formed.

ABEQ US 5160490 A UPAB: 930922

Cytological testing appts. comprises a three-dimensional cell culture (TDCC) positioned in a container to which a test substance can be added, in which the TDCC comprises parenchymal cells cultured on a living stromal tissue prepd. in-vitro comprising stromal cells and connective tissue proteins naturally secreted by stromal cells attached to and enveloping a framework composed of a biocompatible, non-living material formed to a three dimensional structure having interstitial spaces bridged by the stromal cells.

USE/ADVANTAGE - The stromal matrix provides the support, growth factors and regulatory factors necessary to sustain longterm active proliferation of cells in culture. When grown in this 3-D system the proliferating cells mature and segregate properly to form components of adult tissues analagous to counterparts found in-vivo.

0/25

=> file biosis

FILE 'BIOSIS' ENTERED AT 12:20:17 ON 27 MAR 1998

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FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 20 March 1998 (980320/ED)  
CAS REGISTRY NUMBERS (R) LAST ADDED: 20 March 1998 (980320/UP)

=> d l192 1 all

L192 ANSWER 1 OF 1 BIOSIS COPYRIGHT 1998 BIOSIS

AN 97:175695 BIOSIS

DN 99467408

TI The use of bone-marrow-derived fibroblastoid cells and fresh bone marrow in the treatment of bone defects: An experimental study.

AU Krzymanski G; Kalczak M; Wiktor-Jedrzejczak W

CS Dep. Maxillofacial Surg., Central Clin. Hosp., Military Sch. Med., ul. Szaserow 128, 00-909 Warsaw 60, Poland

SO International Journal of Oral and Maxillofacial Surgery 26 (1). 1997. 55-60. ISSN: 0901-5027

LA English

PR Biological Abstracts Vol. 103 Iss. 009 Ref. 123077

AB **Bone-marrow aspirate** (containing bone progenitor cells), in vitro expanded autologous bone-marrow-derived stromal fibroblastoid cells, and a combination thereof were tested for the potential to fill bone defects. They were compared to **grafts** of fresh autologous bone or allogeneic devitalized bone. Mandibular defects in rabbits were chosen for this study. The best results were obtained with a combination of in vitro expanded bone-marrow-derived stromal fibroblastoid cells and fresh autologous bone marrow or fresh autologous marrow alone. The effects of these two **grafts** were similar to **grafts** of fresh autologous bone and significantly superior to **grafts** of devitalized allogeneic bone providing only a bone **matrix**. The in vitro expanded marrow stromal cells induced very significant bone ingrowth, and their effects were only slightly inferior to fresh autologous bone but were superior to devitalized allogeneic bone. These studies suggest that bone marrow is a good source of osteogenic cells both for immediate transplantation and for in vitro expansion and subsequent transplantation.

ST RESEARCH ARTICLE; RABBIT; FIBROBLASTOID CELL; BONE MARROW; BONE DEFECT; BONE REGENERATION; BONE MARROW TRANSPLANTATION; ORAL SYSTEM; SKELETAL SYSTEM; BONE MARROW DERIVED; IMMUNE SYSTEM; BLOOD AND LYMPHATICS; BONE DISEASE; THERAPEUTIC METHOD

CC Cytology and Cytochemistry-Animal \*02506

Pathology, General and Miscellaneous-General \*12502

Pathology, General and Miscellaneous-Therapy \*12512

Blood, Blood-Forming Organs and Body Fluids-General; Methods \*15001

Bones, Joints, Fasciae, Connective and Adipose Tissue-General;

Methods \*18001

Dental and Oral Biology-General; Methods \*19001

BC Leporidae 86040

=> file medline

FILE 'MEDLINE' ENTERED AT 12:20:41 ON 27 MAR 1998

FILE LAST UPDATED: 26 MAR 1998 (19980326/UP). FILE COVERS 1966 TO DATE.

THE MEDLINE FILE WAS RELOADED FEBRUARY 15, 1998, TO REFLECT THE ANNUAL MESH (MEDICAL SUBJECT HEADING) CHANGES. ENTER HELP RLOAD FOR DETAILS.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

=> d l194 1 all

L194 ANSWER 1 OF 1 MEDLINE

AN 97236378 MEDLINE

DN 97236378

TI The use of bone-marrow-derived fibroblastoid cells and fresh bone marrow in the treatment of bone defects: an experimental study.

AU Krzymanski G; Kalczak M; Wiktor-Jedrzejczak W

CS Department of Maxillofacial Surgery, Military School of Medicine, Warsaw, Poland.

SO INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY, (1997 Feb) 26 (1) 55-60.

Journal code: IJO. ISSN: 0901-5027.

CY Denmark

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; Dental Journals

EM 199708

EW 19970801

AB **Bone-marrow aspirate** (containing bone progenitor cells), in vitro expanded autologous bone-marrow-derived stromal fibroblastoid cells, and a combination thereof were tested for the potential to fill bone defects. They were compared to **grafts** of fresh autologous bone or allogeneic devitalized bone. Mandibular defects in rabbits were chosen for this study. The best results were obtained with a combination of in vitro expanded bone-marrow-derived stromal fibroblastoid cells and fresh autologous bone marrow or fresh autologous marrow alone. The effects of these two **grafts** were similar to **grafts** of fresh autologous bone and significantly superior to **grafts** of devitalized allogeneic bone providing only a bone **matrix**. The in vitro expanded marrow stromal cells induced very significant bone ingrowth, and their effects were only slightly inferior to fresh autologous bone but were superior to devitalized allogeneic bone. These studies suggest that bone marrow is a good source of osteogenic cells both for immediate transplantation and for in vitro expansion and subsequent transplantation.

CT Check Tags: Animal; Comparative Study; Female; Male

\*Bone Marrow: CY, cytology

\*Bone Marrow Transplantation

Bone Marrow Transplantation: PA, pathology



Bone Regeneration  
Cells, Cultured  
Connective Tissue: PA, pathology  
Fibroblasts: PA, pathology  
\*Fibroblasts: TR, transplantation  
Freeze Drying  
Mandibular Diseases: PA, pathology  
Mandibular Diseases: RA, radiography  
\*Mandibular Diseases: SU, surgery  
Osteogenesis  
Rabbits  
Tissue Preservation  
Transplantation, Autologous  
Transplantation, Homologous